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=> d his

     (FILE 'HOME' ENTERED AT 09:51:56 ON 21 JAN 2004)

     FILE 'MEDLINE, EMBASE, BIOSIS, BIOTECHDS, SCISEARCH, HCAPLUS, NTIS,
     LIFESCI' ENTERED AT 09:53:31 ON 21 JAN 2004
L1          2031 S BETA(A)GLYCOSIDASE?
L2             2 S THREMOPHILIC
L3           188 S L1 AND ASSAY?
L4       6329367 S CLON? OR EXPRESS? OR RECOMBINANT
L5        141988 S OLIGOSACCHARIDE OR HETEROSACCHARIDE
L6         24552 S SYNTHESIS AND L5
L7            91 S L1 AND L6
L8            16 S L4 AND L7
L9            10 DUP REM L8 (6 DUPLICATES REMOVED)
L10           92 DUP REM L3 (96 DUPLICATES REMOVED)
L11            4 S L10 AND L5
                 E MATSUI I/AU
L12          621 S E3
                 E ISHIKAWA K/AU
L13         8313 S E3
                 E ISHIDA H/AU
L14         5906 S E3
                 E KOSUGI Y/AU
L15          454 S E3
L16        15129 S L12 OR L13 OR L14 OR L15
L17            0 S L3 AND L16
L18            4 S L1 AND L16
L19            1 DUP REM L18 (3 DUPLICATES REMOVED)
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 NEWS  3  SEP 09   CA/CAplus records now contain indexing from 1907 to the
                   present
 NEWS  4  DEC 08   INPADOC: Legal Status data reloaded
 NEWS  5  SEP 29   DISSABS now available on STN
 NEWS  6  OCT 10   PCTFULL: Two new display fields added
 NEWS  7  OCT 21   BIOSIS file reloaded and enhanced
 NEWS  8  OCT 28   BIOSIS file segment of TOXCENTER reloaded and enhanced
 NEWS  9  NOV 24   MSDS-CCOHS file reloaded
 NEWS 10  DEC 08   CABA reloaded with left truncation
 NEWS 11  DEC 08   IMS file names changed
 NEWS 12  DEC 09   Experimental property data collected by CAS now available
                   in REGISTRY
 NEWS 13  DEC 09   STN Entry Date available for display in REGISTRY and CA/CAplus
 NEWS 14  DEC 17   DGENE: Two new display fields added
 NEWS 15  DEC 18   BIOTECHNO no longer updated
 NEWS 16  DEC 19   CROPU no longer updated; subscriber discount no longer
                   available
 NEWS 17  DEC 22   Additional INPI reactions and pre-1907 documents added to CAS
                   databases
 NEWS 18  DEC 22   IFIPAT/IFIUDB/IFICDB reloaded with new data and search fields
 NEWS 19  DEC 22   ABI-INFORM now available on STN

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               MACINTOSH VERSION IS V6.0b(ENG) AND V6.0Jb(JP),
               AND CURRENT DISCOVER FILE IS DATED 23 SEPTEMBER 2003
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FILE 'LIFESCI' ENTERED AT 09:53:31 ON 21 JAN 2004
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=> s beta(a)glycosidase?
L1         2031 BETA(A) GLYCOSIDASE?

=> s thremophilic
L2            2 THREMOPHILIC

=> s l1 and assay?
L3          188 L1 AND ASSAY?

=> s clon? or express? or recombinant
   4 FILES SEARCHED...
L4      6329367 CLON? OR EXPRESS? OR RECOMBINANT

=> s oligosaccharide or heterosaccharide
L5       141988 OLIGOSACCHARIDE OR HETEROSACCHARIDE

=> s synthesis and l5
L6        24552 SYNTHESIS AND L5

=> s l1 and l6
L7           91 L1 AND L6

=> s l4 and l7
L8           16 L4 AND L7

=> dup rem l8
PROCESSING COMPLETED FOR L8
L9           10 DUP REM L8 (6 DUPLICATES REMOVED)

=> d 1-10 ibib ab

L9    ANSWER 1 OF 10  BIOTECHDS COPYRIGHT 2004 THOMSON DERWENT/ISI on STN
ACCESSION NUMBER: 2003-13974  BIOTECHDS
```

TITLE: Solid-phase **synthesis** of **oligosaccharide** or glycopeptide, by enzymatically glycosylating saccharide or polypeptide acceptor molecule attached to solid support, in the presence of a glycosynthase enzyme; sugar and peptide production using **recombinant** enzyme

AUTHOR: WITHERS S G; JENSEN K J; PETERSEN L; TOLBERG J L
PATENT ASSIGNEE: UNIV BRITISH COLUMBIA

PATENT INFO: WO 2003018605 6 Mar 2003
APPLICATION INFO: WO 2002-IB3915 26 Aug 2002
PRIORITY INFO: US 2001-314921 24 Aug 2001; US 2001-314921 24 Aug 2001
DOCUMENT TYPE: Patent
LANGUAGE: English
OTHER SOURCE: WPI: 2003-342444 [32]

AB DERWENT ABSTRACT:

NOVELTY - Solid-phase **synthesis** (M) of an **oligosaccharide** or a glycopeptide, involves enzymatically glycosylating a saccharide or polypeptide acceptor molecule attached to a solid support, where the enzymatic glycosylation is catalyzed by a glycosynthase enzyme.

WIDER DISCLOSURE - Also disclosed are: (1) an isolated polypeptide comprising Agrobacterium faecalis glycosynthase molecule, or a fragment of the polypeptide; (2) an isolated nucleic acid encoding the above mentioned polypeptide; (3) analogs of proteins or peptides which comprise A.faecalis glycosynthase; and (4) polypeptides which have been modified so as to improve their resistance to proteolytic degradation or to optimize solubility properties or to render them more suitable as a therapeutic agent.

BIOTECHNOLOGY - Preferred Method: The saccharide is a monosaccharide or an **oligosaccharide** comprising at least two monosaccharide units. The acceptor molecule is an amino acid, a polypeptide comprising at least two amino acids, an aminophenyl derivative of a saccharide or a paraaminophenyl derivative of a saccharide, an antibiotic, lipid or polypeptide. The glycosynthase enzyme is a mutant form of Agrobacterium sp. beta-glucosidase. The beta-glucosidase contains a Glu358Ser mutation or Glu358Gly mutation. The glycosynthase enzyme is a mutant form of Cellulomonas fimi mannosidase 2A. The mannosidase contains a Glu519Ser, Glu519Gly or Glu519Ala mutation. The glycosynthase enzyme is a mutant form of Humicola insolens endoglucanase-1. The endoglucanase contains a Glu198Ser, Glu198Gly or Glu198Ala mutation. The glycosynthase enzyme is a mutant form of Sulfolobus solfataricus **beta-glycosidase**. The **beta-glycosidase** contains a Glu387Ser, Glu387Gly or Glu387Ala mutation. The glycosynthase enzyme is a mutant form of Bacillus licheniformis 1,3-1,4-glucanase. The 1,3-1,4-glucanase contains a Glu134Ser, Glu134Gly or Glu134Ala mutation.

USE - (M) is useful for solid-phase **synthesis** of an **oligosaccharide** or a glycopeptide (claimed).

EXAMPLE - Polyethylene glycol polyacrylamide copolymers (PEGA) resin (3.21 g, swelled in methanol (MeOH), 9.41% w/w) was washed and derivatized with PALdehyde. Without drying after washing, the resin was subjected to reductive amination with glycine amide hydrochloride (133 mg, 1.20 mmol, 20 equivalent) in the presence of NaBH3CN (78 mg, 1.20 mmol, 20 equiv) in AcOH-MeOH (1:99). After shaking for 24 hours, resin was washed (3xN,N-dimethylformamide (DMF), 3xDCM-MeOH (2:1), and 5xDCM). The second amino acid was coupled as the symmetrical aithydride: Fmoc-Gly-OH (178 mg, 060 mmol, 10 equiv) and dicyclohexyl carbodiimide (62 mg, 0.30 mmol, 5 equiv) were dissolved in freshly distilled DCM (8 ml). After stirring for 15 minutes, the reaction mixture was filtered and concentrated. Resin was washed with freshly distilled DCM (3x), the symmetrical anhydride in freshly distilled DCM (4 ml) was added, and the mixture shaken for 90 mm followed by washing (3xDCM). The sequence was repeated once followed by washing (3xDCM and 3xDMF). Remaining amino groups were capped by acetylation for 16 hours, followed by washing (3xDCM and 3xDMF). An aliquot of resin was dried and treated with

piperidine-DMF (1:4) for Fmoc-quantification Ref514061979fh1 giving a loading of 0.089 mmol/g. Remaining resin was deprotected with piperidine-DMF, and then washed (5xDMF). The third amino acid (Gly) was coupled as the pentafluorophenyl (Pfp) ester:Fmoc-Gly-OPfp (85 mg, 0.18 mmol, 3.0 equiv) and HOBt (25 mg, 0.18 mmol, 3.0 equiv) were dissolved in dry DMTF (2 ml) and added to the resin swelled in DMF. After shaking at 400 minutes-1 for 100 minutes, the resin was drained, washed twice with DMF and deprotected as above. The fourth amino acid (glucosylated Tyr) was again coupled as the Pf-ester:Fmoc-Tyr(BzO4-beta-D-Glc)-OPfp and HOBt (16 mg, 0.12 mmol, 2.0 equiv) were dissolved in dry DMF (2 ml) and added to the resin. After shaking at 400 minutes-1 for 16 hours, the resin was drained, washed twice with DMF and deprotected as above. The fifth and last amino acid (Gly) was coupled as N-acetylglycine using BOP/HOBt: N-acetylglycine (35 mg, 0.30 mmol, 5.0 equiv), BOP (132 mg, 0.30 mol, 5.0 equiv), and HOBt (40 mg, 0.30 mmol, 5.0 equiv) was dissolved in dry DMF (2.5 ml). After 5 mm, DIEA was added (103 ml, 0.60 mmol, 10 equiv) and the mixture was added to the resin. After shaking for 16 hours, the resin was drained and washed. An aliquot was cleaved. reverse phase-high performance liquid chromatography (RP-HPLC) (215 nm) indicated purity of approximately 85% and the identity of the product was established. Remaining resin was washed and deprotected until no methyl benzoate could be detected in the liquid. Resin was washed. A sample was cleaved and analyzed. To improve the chromatographic properties another aliquot of resin was acetylated and cleaved. RP-HPLC indicated purity of approximately 94% and identity of the product was again established. At this point, remaining resin was collapsed with increasing amounts of diethyl ether in DCM as described above and dried in vacuo. The remainder of the non-acetylated resin above (199.4 mg) was subjected to enzymatic glycosylation using desalted Abg E358G (1.0 mg/ml) and 20 mg a-D-galactosyl fluoride (36.4 mg, 0.20 mmol) in 100 mM NaPi at pH 9.00 (total 10.0 ml) for 48 hours. After washing, acetylation, and cleavage as above, the residue was treated with dry diethyl ether and concentrated to obtain 19 mg of crude product. RP-HPLC indicated 52% conversion and the identity of the product was established. Purification of the mixture by preparative HPLC yielded 3.8 mg of monosaccharide glycopeptide and 6.3 mg of disaccharide glycopeptide. This corresponded to yields of 28 and 33%, respectively, or a total of 61% based on Fmoc-Quantification of second amino acid. (51 pages)

L9 ANSWER 2 OF 10 MEDLINE on STN DUPLICATE 1

ACCESSION NUMBER: 2003361724 MEDLINE
DOCUMENT NUMBER: 22744263 PubMed ID: 12859194
TITLE: Activity of hyperthermophilic glycosynthases is significantly enhanced at acidic pH.
AUTHOR: Perugino Giuseppe; Trincone Antonio; Giordano Assunta; van der Oost John; Kaper Thijs; Rossi Mose; Moracci Marco
CORPORATE SOURCE: Institute of Protein Biochemistry-Consiglio Nazionale delle Ricerche, Via P. Castellino 111, 80131, Naples Italy.
SOURCE: BIOCHEMISTRY, (2003 Jul 22) 42 (28) 8484-93.
Journal code: 0370623. ISSN: 0006-2960.
PUB. COUNTRY: United States
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 200310
ENTRY DATE: Entered STN: 20030805
Last Updated on STN: 20031008
Entered Medline: 20031006

AB We have previously shown that the hyperthermophilic glycosynthase from Sulfolobus solfataricus (Ssbeta-glyE387G) can promote the **synthesis** of branched **oligosaccharides** from activated beta-glycosides, at pH 6.5, in the presence of 2 M sodium formate as an external nucleophile. In an effort to increase the synthetic potential of hyperthermophilic glycosynthases, we report a new method to reactivate the

Ssbeta-glyE387G glycosynthase and two novel mutants in the nucleophile of the **beta-glycosidases** from the hyperthermophilic Archaea Thermosphaera aggregans (Tabeta-gly) and Pyrococcus furiosus (CelB). We describe here that, at pH 3.0 and low concentrations of sodium formate buffer, the three hyperthermophilic glycosynthases show k(cat) values similar to those of the wild-type enzymes and 17-fold higher than those observed at the usual reactivation conditions in 2 M sodium formate at pH 6.5. Moreover, at acidic pH the three reactivated mutants have wide substrate specificity and improved efficiency in the synthetic reaction. The data reported suggest that the reactivation conditions modify the ionization state of the residue acting as an acid/base catalyst. This new reactivation method can be of general applicability on hyperthermophilic glycosynthases whose intrinsic stability allows their exploitation as synthetic tools at low pH.

L9 ANSWER 3 OF 10 MEDLINE on STN DUPLICATE 2
ACCESSION NUMBER: 2003439642 IN-PROCESS
DOCUMENT NUMBER: PubMed ID: 12747805
TITLE: Enhanced **expression** of the gene for **beta -glycosidase** of Thermus caldophilus GK24 and **synthesis** of galacto-**oligosaccharides** by the enzyme.
AUTHOR: Choi Jeong Jin; Oh Eun-Joo; Lee Yoon-Jin; Suh Dong Sang; Lee Jae Heung; Lee Soo-Won; Shin Hyung-Tai; Kwon Suk-Tae
CORPORATE SOURCE: Department of Genetic Engineering, Sungkyunkwan University, 300 Chunchun-Dong, Jangan-Ku, Suwon 440-746, South Korea.
SOURCE: Biotechnology and applied biochemistry, (2003 Oct) 38 (Pt 2) 131-6.
Journal code: 8609465. ISSN: 0885-4513.
PUB. COUNTRY: England: United Kingdom
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: IN-PROCESS; NONINDEXED; Priority Journals
ENTRY DATE: Entered STN: 20030923
Last Updated on STN: 20031218

AB The gene (bglT) encoding Tca **beta-glycosidase** (Thermus caldophilus GK24 **beta-glycosidase**) was overexpressed under the control of the trp promoter on a high-copy-number plasmid, pTRPES, in Escherichia coli W3110. The purified Tca **beta-glycosidase** enzyme was used in a galactosyl-transfer reaction to synthesize galacto-**oligosaccharides** from lactose. The optimum temperature and pH for the enzyme to synthesize galacto-**oligosaccharides** from 30% (w/v) lactose were 80 degrees C and 6.0, respectively. The major product of the reaction was a trisaccharide. The thermostable Tca **beta-glycosidase** produced galacto-**oligosaccharides** efficiently during the hydrolysis of lactose.

L9 ANSWER 4 OF 10 BIOTECHDS COPYRIGHT 2004 THOMSON DERWENT/ISI on STN
ACCESSION NUMBER: 2001-11222 BIOTECHDS
TITLE: **Synthesis** of beta-D-glucosyl- and beta-D-fucosyl-glucoses using **beta-glycosidase** from Thermus thermophilus; **recombinant** enzyme **expression** in Escherichia coli for use in **oligosaccharide** production
AUTHOR: Fourage L; *Colas B
CORPORATE SOURCE: CNRS; Univ.Nantes
LOCATION: Lab. de Biochimie, Unite de Recherche sur la Biocatalyse, CNRS 2230, Faculte des Sciences et des Techniques, Universite de Nantes, 2 rue de la Houssiniere BP 92208, 44322 Nantes, Cedex 3, France.
Email: bernard.colas@chimbio.univ-nantes.fr
SOURCE: Appl.Microbiol.Biotechnol.; (2001) 56, 3-4, 406-10
CODEN: EJABDD

ISSN: 0175-7598
DOCUMENT TYPE: Journal
LANGUAGE: English

AB The thermostable **beta-glycosidase** from Thermus thermophilus was **cloned** and overexpressed in Escherichia coli and used to catalyze the transfer of beta-D-glucosyl and beta-D-fucosyl from the corresponding p-nitrophenyl-beta-D-glycopyranosides to a hydroxyl group of glycose in the **synthesis** of beta-D-glucosyl-D-glucopyranoses and beta-D-fucosyl-D-glucopyranoses. The yields in disaccharides produced under conditions of non-initial velocity were very attractive and the formation of the beta(1-3) linked disaccharides was largely favored. The enzyme could constitute a valuable biocatalyst for the **synthesis** of disaccharides involving such structures as, for example Bifidus factors. (21 ref)

L9 ANSWER 5 OF 10 SCISEARCH COPYRIGHT 2004 THOMSON ISI on STN
ACCESSION NUMBER: 2001:677233 SCISEARCH
THE GENUINE ARTICLE: 465UP
TITLE: **Synthesis** of beta-D-glucosyl- and beta-D-fucosyl-glucoses using **beta-glycosidase** from Thermus thermophilus
AUTHOR: Fourage L; Colas B (Reprint)
CORPORATE SOURCE: Univ Nantes, Fac Sci & Tech, CNRS 2230, Unite Rech Biocatalyse, Lab Biochim, 2 Rue Houssiniere BP 92208, F-44322 Nantes 3, France (Reprint); Univ Nantes, Fac Sci & Tech, CNRS 2230, Unite Rech Biocatalyse, Lab Biochim, F-44322 Nantes 3, France
COUNTRY OF AUTHOR: France
SOURCE: APPLIED MICROBIOLOGY AND BIOTECHNOLOGY, (AUG 2001) Vol. 56, No. 3-4, pp. 406-410.
Publisher: SPRINGER-VERLAG, 175 FIFTH AVE, NEW YORK, NY 10010 USA.
ISSN: 0175-7598.
DOCUMENT TYPE: Article; Journal
LANGUAGE: English
REFERENCE COUNT: 21

ABSTRACT IS AVAILABLE IN THE ALL AND IALL FORMATS

AB The thermostable **beta -glycosidase** from Thermus thermophilus, **cloned** and overexpressed in Escherichia coli was used to catalyze the transfer Of beta -D-glucosyl and beta -D-fucosyl from the corresponding p-nitrophenyl-beta -D-glycopyranosides to a hydroxyl group of glucose in the **synthesis** Of beta -D-glucosyl-D-glucopyranoses and beta -D-fucosyl-D-glucopyranoses. The yields in disaccharides produced under conditions of non-initial velocity were very attractive and the formation of the beta (1-3) linked disaccharides was largely favored. The enzyme could constitute a valuable biocatalyst for the **synthesis** of disaccharides involving such structures as, for example, Bifidus factors.

L9 ANSWER 6 OF 10 SCISEARCH COPYRIGHT 2004 THOMSON ISI on STN
ACCESSION NUMBER: 2002:18108 SCISEARCH
THE GENUINE ARTICLE: 506BG
TITLE: Tailoring the substrate specificity of the **beta-glycosidase** from the thermophilic archaeon Sulfolobus solfataricus
AUTHOR: Corbett K; Fordham-Skelton A P; Gatehouse J A; Davis B G (Reprint)
CORPORATE SOURCE: Univ Durham, Dept Chem, South Rd, Durham DH1 3LE, England (Reprint); Univ Durham, Dept Chem, Durham DH1 3LE, England; Univ Durham, Dept Biol Sci, Durham DH1 3LE, England; Univ Durham, Res Ctr Biol Chem, Durham DH1 3LE, England; Univ Oxford, Dyson Perrins Lab, Oxford OX1 3QY, England; SERC, Daresbury Lab, CLRC, Warrington WA4 4AD, Cheshire, England

COUNTRY OF AUTHOR: England
SOURCE: FEBS LETTERS, (14 DEC 2001) Vol. 509, No. 3, pp. 355-360.
Publisher: ELSEVIER SCIENCE BV, PO BOX 211, 1000 AE AMSTERDAM, NETHERLANDS.
ISSN: 0014-5793.
DOCUMENT TYPE: Article; Journal
LANGUAGE: English
REFERENCE COUNT: 40

ABSTRACT IS AVAILABLE IN THE ALL AND IALL FORMATS

AB The substrate specificity of the thermophilic **beta-glycosidase** (lacS) from the archaeon Sulfolobus solfataricus (SS betaG), a member of the glycohydrolase family 1, has been analysed at a molecular level using predictions from known protein sequences and structures and through site-directed mutagenesis. Three critical residues were identified and mutated to create catalysts with altered and broadened specificities for use in glycoside **synthesis**. The wild-type (WT) and mutated sequences were **expressed** as **recombinant** fusion proteins in Escherichia coli, with an added His(6)-tag to allow one-step chromatographic purification. Consistent with side-chain orientation towards OH-6, the single Met439 --> Cys mutation enhances D-xylosidase specificity 4.7-fold and decreases D-fucosidase activity 2-fold without greatly altering its activity towards other D-glycoside substrates. Glu432 --> Cys and Trp433 --> Cys mutations directed towards OH-4 and -3, respectively, more dramatically impair glucose (Glc), galactose (Gal), fucose specificity than for other glycosides, resulting in two glycosidases with greatly broadened substrate specificities. These include the first examples of stereospecificity tailoring in glycosidases (e.g. WT --> W433C, k(cat)/K-m (Gal):k(cat)/K-M (mannose (Man))=29.4:1 -->1.2:1). The robustness and high utility of these broad specificity SS betaG mutants in parallel **synthesis** were demonstrated by the formation of libraries of P-glycosides of Glc, Gal, xylose, Man in one-pot preparations at 50 degreesC in the presence of organic solvents, that could not be performed by SS betaG-WT. (C) 2001 Federation of European Biochemical Societies. Published by Elsevier Science B.V. All rights reserved.

L9 ANSWER 7 OF 10 SCISEARCH COPYRIGHT 2004 THOMSON ISI on STN
ACCESSION NUMBER: 1999:496230 SCISEARCH
THE GENUINE ARTICLE: 208XA
TITLE: **Cloning** and **expression** of a **beta-glycosidase** gene from Thermus thermophilus. Sequence and biochemical characterization of the encoded enzyme
AUTHOR: Dion M; Fourage L; Hallet J N; Colas B (Reprint)
CORPORATE SOURCE: UNIV NANTES, FAC SCI & TECH, UNITE RECH BIOCATALYSE, 2 RUE HOUSSINIERE, BP 92208, F-44322 NANTES 3, FRANCE (Reprint); UNIV NANTES, FAC SCI & TECH, UNITE RECH BIOCATALYSE, F-44322 NANTES 3, FRANCE
COUNTRY OF AUTHOR: FRANCE
SOURCE: GLYCOCONJUGATE JOURNAL, (JAN 1999) Vol. 16, No. 1, pp. 27-37.
Publisher: KLUWER ACADEMIC PUBL, SPUIBOULEVARD 50, PO BOX 17, 3300 AA DORDRECHT, NETHERLANDS.
ISSN: 0282-0080.
DOCUMENT TYPE: Article; Journal
FILE SEGMENT: LIFE
LANGUAGE: English
REFERENCE COUNT: 67

ABSTRACT IS AVAILABLE IN THE ALL AND IALL FORMATS

AB A 3.2 kilobase pair DNA fragment from Thermus thermophilus HB27 coding for a beta-galactosidase activity was **cloned** and sequenced. A gene and a truncated open reading frame orf1 encoding respectively a **beta-glycosidase** (tt beta-gly) and probably a sugar permease were located directly adjacent to each other. The deduced

aminoacid sequence of the enzyme Tt beta-gly showed strong identity with those of **beta-glycosidases** belonging to the glycosyl hydrolase family 1. The enzyme was overexpressed in Escherichia coli and was purified by a two-step purification procedure. The **recombinant** enzyme is monomeric with a molecular mass of 49-kDa. It catalyzes the hydrolysis of beta-D-galactoside, beta-D-glucoside and beta-D-fucoside derivatives. However, the kcat/Km ratio is much higher for p-nitrophenyl-beta-D-glucoside and p-nitrophenyl-beta-D-fucoside than for p-nitrophenyl-beta-D-galactoside. The specificity towards linkage positions of the disaccharides tested decreased in the following order: beta 1-3 (100%). beta 1-2 (71%). beta 1-4 (40%). beta 1-6 (10%). Tt beta-gly is a thermostable enzyme displaying an optimum temperature of 88 degrees C and a half life of 10 min at 90 degrees C. It performs transglycosylation reactions at high temperature with a yield exceeding 63% for transfucosylation reactions. On the basis of this work, the enzyme appears to be an attractive tool in the **synthesis** of fucosyl adducts and fucosyl sugars.

L9 ANSWER 8 OF 10 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1995:342079 HCAPLUS
DOCUMENT NUMBER: 122:265810
TITLE: Enzymic **synthesis** of carbohydrate derivatives using .**beta**.-**glycosidase** of Sulfolobus solfataricus.
AUTHOR(S): Trincone, A.; Improta, R.; Nucci, R.; Rossi, M.; Gambacorta, A.
CORPORATE SOURCE: Istituto per la Chimica di Molecole di Interesse Biologico, CNR, Arco, 80072, Italy
SOURCE: Biocatalysis (1994), 10(1-4), 195-210
CODEN: BIOCED; ISSN: 0886-4454
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Enzymic **synthesis** of different .beta.-D-glycosides was obtained using as biocatalyst immobilized cells, crude homogenate, and homogeneous native and **recombinant** .**beta**.-**glycosidase** activity of the thermophilic archaeon S. solfataricus. In particular our investigation was concerned with the selectivity in the glycosidation of hydroxybenzyl alcs., salicin, 1,2-propanediol, and more complex polyols as well as the use of immobilized cells for the **synthesis** of hexyl .beta.-D-glucoside. The arom. glucosides obtained by enzyme-catalyzed transglucosidation were used for kinetics studies of purified Sulfolobus solfataricus enzyme in the hydrolysis reaction.

L9 ANSWER 9 OF 10 SCISEARCH COPYRIGHT 2004 THOMSON ISI on STN DUPLICATE 3
ACCESSION NUMBER: 95:312174 SCISEARCH
THE GENUINE ARTICLE: QV301
TITLE: THERMOSTABLE **BETA-GLYCOSIDASE** FROM SULFOLOBUS-SOLFATARICUS
AUTHOR: MORACCI M; CIARAMELLA M; NUCCI R; PEARL L H; SANDERSON I; TRINCONE A; ROSSI M (Reprint)
CORPORATE SOURCE: INST PROT BIOCHEM & ENZYMOL, VIA MARCONI 10, I-80125 NAPLES, ITALY (Reprint); INST PROT BIOCHEM & ENZYMOL, I-80125 NAPLES, ITALY; IST CHIM MOLEC INTERESSE BIOL, I-80072 NAPLES, ITALY; UNIV LONDON UNIV COLL, DEPT BIOCHEM & MOLEC BIOL, LONDON WC1E 6BT, ENGLAND
COUNTRY OF AUTHOR: ITALY; ENGLAND
SOURCE: BIOCATALYSIS, (1994) Vol. 11, No. 2, pp. 89-103. ISSN: 0886-4454.
DOCUMENT TYPE: Article; Journal
FILE SEGMENT: LIFE
LANGUAGE: ENGLISH
REFERENCE COUNT: 21
ABSTRACT IS AVAILABLE IN THE ALL AND IALL FORMATS
AB The Sulfolobus solfataricus **beta-glycosidase** (S

beta gly) is a thermostable and thermophilic glycosyl-hydrolase with broad substrate specificity. The enzyme hydrolizes beta-D-gluco-, fuco-, and galactosides, and a large number of beta-linked glycoside dimers and oligomers, linked beta 1-3, beta 1-4, and beta 1-6, It is able to hydrolize **oligosaccharides** with up to 5 glucose residues. Furthermore, it is also able to promote transglycosylation reactions. The corresponding gene has been **cloned** and overexpressed both in yeast and Escherichia coli. Based on sequence acid functional data, the S beta gly has been assigned to the so-called EGA family of glycosyl-hydrolases, including **beta-glycosidases**, **beta**-galactosidases and phosho-beta-galactosidases from mesophilic and thermophilic organisms of the three domains. The S beta gly has been crystallized and the resolution of its structure is in progress. Because of its special properties, the enzymes has considerable biotechnological potential.

L9 ANSWER 10 OF 10 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN
ACCESSION NUMBER: 1982:222786 BIOSIS
DOCUMENT NUMBER: PREV198273082770; BA73:82770
TITLE: STRUCTURE AND **EXPRESSION** OF GLYCO PROTEINS CONTROLLED BY THE QA-1 A ALLELE.
AUTHOR(S): ROTHENBERG E [Reprint author]; TRIGLIA D
CORPORATE SOURCE: SALK INSTITUTE, DEP CANCER BIOL, POST OFFICE BOX 8500, SAN DIEGO, CALIF 92138, USA
SOURCE: Immunogenetics, (1981) Vol. 14, No. 6, pp. 455-468. CODEN: IMNGBK. ISSN: 0093-7711.
DOCUMENT TYPE: Article
FILE SEGMENT: BA
LANGUAGE: ENGLISH
AB The alloantigen controlled by the Qa-1a allele is a glycoprotein that exists in 2 forms. The 1st, an intracellular molecule of apparent MW of 44,000 daltons, appears to be a kinetic precursor of the 2nd, a cell-surface molecule with an apparent size of 47,000 daltons. The intracellular form of Qa-1 is distinct from that of the TL glycoprotein in 2 ways: its polypeptide backbone is approximately 5000 daltons shorter, and it possesses 3 sites of high-mannose carbohydrate attachment, while TL has only one. In the cell-surface form of Qa-1, all 3 carbohydrate chains are processed to structures that resist endoglycosidase H digestion, presumably complex-type **oligosaccharides**. Concomitant with these late carbohydrate-processing steps is the formation of stable complexes between Qa-1 and .beta.2-microglobin. The timing of this association provides a further contrast between Qa-1 and TL, which is associated with .beta.2-microglobulin shortly after its **synthesis** . The Qa-1 glycoproteins were identified genetically by their **synthesis** in B6-Tl+ (Qa-1a/Tlaa) splenocytes but not in splenocytes of congenic B6.K1 and B6.K2 (Qa-1b/Tlab) mice, and by their absence from the products of BALB/c (Qa-1b/Tlac) splenocytes. The cells synthesizing Qa-1 are at least as prevalent in Ig+ spleen-cell populations as in T cell-enriched splenic Ig populations. Active Qa-1 **synthesis** appears to take place at a high rate in normal splenic B cells without mitogenic stimulation.

=> d his

(FILE 'HOME' ENTERED AT 09:51:56 ON 21 JAN 2004)

FILE 'MEDLINE, EMBASE, BIOSIS, BIOTECHDS, SCISEARCH, HCAPLUS, NTIS, LIFESCI' ENTERED AT 09:53:31 ON 21 JAN 2004

L1	2031	S	BETA(A)GLYCOSIDASE?
L2	2	S	THREMOPHILIC
L3	188	S	L1 AND ASSAY?
L4	6329367	S	CLON? OR EXPRESS? OR RECOMBINANT
L5	141988	S	OLIGOSACCHARIDE OR HETEROSACCHARIDE

```
L6         24552 S SYNTHESIS AND L5
L7            91 S L1 AND L6
L8            16 S L4 AND L7
L9            10 DUP REM L8 (6 DUPLICATES REMOVED)

=> dup rem l3
PROCESSING COMPLETED FOR L3
L10           92 DUP REM L3 (96 DUPLICATES REMOVED)

=> s l10 and l5
   7 FILES SEARCHED...
L11            4 L10 AND L5

=> d 1-4 ibib ab

L11  ANSWER 1 OF 4  EMBASE  COPYRIGHT 2004 ELSEVIER INC. ALL RIGHTS RESERVED.
     on STN
ACCESSION NUMBER:   2003081409  EMBASE
TITLE:              Maillard reactions and increased enzyme inactivation during
                    oligosaccharide synthesis by a hyperthermophilic
                    glycosidase.
AUTHOR:             Bruins M.E.; Van Hellemond E.W.; Janssen A.E.M.; Boom R.M.
CORPORATE SOURCE:   M.E. Bruins, Department of Food Technology, Food/Bioprocess
                    Engineering Group, Wageningen University, P.O. Box 8129,
                    6700 EV, Wageningen, Netherlands.
                    Marieke.Bruins@Algemeen.pk.wau.nl
SOURCE:             Biotechnology and Bioengineering, (5 Mar 2003) 81/5
                    (546-552).
                    Refs: 21
                    ISSN: 0006-3592  CODEN: BIBIAU
COUNTRY:            United States
DOCUMENT TYPE:      Journal; Article
FILE SEGMENT:       004     Microbiology
LANGUAGE:           English
SUMMARY LANGUAGE:   English
AB   The thermostable Pyrococcus furiosus .beta.-glycosidase
     was used for oligosaccharide production from lactose in a
     kinetically controlled reaction. Our experiments showed that higher
     temperatures are beneficial for the absolute as well as relative
     oligosaccharide yield. However, at reaction temperatures of
     80.degree.C and higher, the inactivation rate of the enzyme in the
     presence of sugars was increased by a factor of 2 compared to the
     inactivation rate in the absence of sugars. This increased enzyme
     inactivation was caused by the occurrence of Maillard reactions between
     the sugar and the enzyme. The browning of our reaction mixture due to
     Maillard reactions was modeled by a cascade of a zeroth- and first-order
     reaction and related to enzyme inactivation. From these results we
     conclude that modification of only a small number of amino groups already
     gives complete inactivation of the enzyme. .COPYRGT. 2003 Wiley
     Periodicals.

L11  ANSWER 2 OF 4  EMBASE  COPYRIGHT 2004 ELSEVIER INC. ALL RIGHTS RESERVED.
     on STN
ACCESSION NUMBER:   2001350554  EMBASE
TITLE:              Production of a lactose-free galacto-
                    oligosaccharide mixture by using selective
                    enzymatic oxidation of lactose into lactobionic acid.
AUTHOR:             Splechtna B.; Petzelbauer I.; Baminger U.; Haltrich D.;
                    Kulbe K.D.; Nidetzky B.
CORPORATE SOURCE:   B. Nidetzky, Division of Biochemical Engineering, Institute
                    of Food Technology, Univ. fur Bodenkultur Wien (BOKU),
                    Muthgasse 18, A-1190 Wien, Vienna, Austria.
                    nide@edv2.boku.ac.at
SOURCE:             Enzyme and Microbial Technology, (4 Oct 2001) 29/6-7
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(434-440).
Refs: 21
ISSN: 0141-0229 CODEN: EMTED2
PUBLISHER IDENT.: S 0141-0229(01)00412-4
COUNTRY: United States
DOCUMENT TYPE: Journal; Article
FILE SEGMENT: 004 Microbiology
LANGUAGE: English
SUMMARY LANGUAGE: English

AB We report a novel and efficient way of producing lactose-derived galacto-**oligosaccharides** (GOS) that do not contain remaining lactose and monosaccharides. The initial sugar mixture was obtained by enzymatic transformation at 70.degree.C of a lactose solution of 270 g/liter using recombinant .**beta.-glycosidase** from the Archaeon Sulfolobus solfataricus. At the optimum reaction time for kinetically controlled transgalactosylation, it contained 46% monosaccharides, 13% lactose and 41% GOS. Lactose was selectively oxidised into lactobionic acid by using fungal cellobiose dehydrogenase which displays a .apprxeq.100-fold preference for reaction with lactose compared to reaction with GOS. Oxidation of lactose was coupled to reduction of 2,6-dichloro-indophenol which was added in catalytic concentrations. The oxidised redox mediator was regenerated continuously by fungal laccase-catalysed reduction of molecular oxygen into water. Ion exchange chromatographies were employed to remove lactobionic acid, other ions and monosaccharides. The final product contained 97% GOS, 1.2% lactose and 2.1% monosaccharides. The yield accounted for 25% of original lactose. An enzymatic **assay** for lactose has been developed. It is robust and allows sensitive quantification of the analyte in complex sugar mixtures containing large excesses of monosaccharides and GOS. .COPYRGT. 2001 Elsevier Science Inc. All rights reserved.

L11 ANSWER 3 OF 4 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN
ACCESSION NUMBER: 1999:490462 BIOSIS
DOCUMENT NUMBER: PREV199900490462
TITLE: beta-Galactooligosaccharide synthesis with beta-galactosidases from Sulfolobus solfataricus, Aspergillus oryzae, and Escherichia coli.
AUTHOR(S): Reuter, Stephan; Nygaard, Anne Rusborg; Zimmermann, Wolfgang [Reprint author]
CORPORATE SOURCE: Biotechnology Laboratory, University of Aalborg, Sohngaardsholmsvej 57, DK-9000, Aalborg, Denmark
SOURCE: Enzyme and Microbial Technology, (Sept., 1999) Vol. 25, No. 6, pp. 509-516. print.
CODEN: EMTED2. ISSN: 0141-0229.
DOCUMENT TYPE: Article
LANGUAGE: English
ENTRY DATE: Entered STN: 16 Nov 1999
Last Updated on STN: 16 Nov 1999

AB The synthetic potential of the thermostable **beta-glycosidase** from Sulfolobus solfataricus was compared with those of the commercially available, thermotolerant beta-galactosidase (beta-D)-galactoside galactohydrolase, EC 3.2.1.23) from Aspergillus oryzae and the nonthermostable beta-galactosidase from Escherichia coli. To synthesize beta-galactooligosaccharides at different temperatures, the transglycosylation approach with lactose as donor and N-acetyllactosamine as acceptor was chosen as a model reaction. Generally, the S. solfataricus enzyme gave the highest yields (48%), followed by the A. oryzae (36%) and the E. coli beta-galactosidases (32%). The main products obtained with the thermostable **beta-glycosidase** from S. solfataricus were beta-D-Gal-(1-6)-D-GlcNAc, beta-D-Gal-(1-4)-D-GlcNAc and several **oligosaccharides**. The enzyme from A. oryzae gave a similar product pattern but lower yields. beta-D-Gal-(1-6)-D-GlcNAc was formed as the main disaccharide by the E. coli beta-galactosidase, and other products could only be detected in trace amounts.

L11 ANSWER 4 OF 4 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN
ACCESSION NUMBER: 1985:254867 BIOSIS
DOCUMENT NUMBER: PREV198579034863; BA79:34863
TITLE: EFFECT OF CASTANOSPERMINE ON THE STRUCTURE AND SECRETION OF GLYCOPROTEIN ENZYMES IN ASPERGILLUS-FUMIGATUS.
AUTHOR(S): ELBEIN A D [Reprint author]; MITCHELL M; MOLYNEUX R J
CORPORATE SOURCE: DEP BIOCHEM, UNIV TEXAS HEALTH SCI CENT, SAN ANTONIO, TEX 78284, USA
SOURCE: Journal of Bacteriology, (1984) Vol. 160, No. 1, pp. 67-75. CODEN: JOBAAY. ISSN: 0021-9193.
DOCUMENT TYPE: Article
FILE SEGMENT: BA
LANGUAGE: ENGLISH

AB A. fumigatus secretes a number of glycosidases into the culture medium when the cells are grown in a mineral salts medium containing guar flour (a galactomannan) as the C source. At least some of these glycosidases were reported to be glycoproteins having N-linked **oligosaccharides**. The effect of the glycoprotein processing inhibitor, castanospermine, on the structures of the N-linked **oligosaccharides** and on the secretion of various glycosidases was studied. Cells were grown in the presence of various amounts of castanospermine; at different times of growth, samples of the media were removed for the measurement of enzymatic activity. Of the 3 glycosidases **assayed**, .beta.-hexosaminidase was most sensitive to castanospermine; and its activity was depressed 30-40% at 100 .mu.g of alkaloid/ml and even more at higher alkaloid concentrations. On the other hand, .beta.-galactosidase activity was hardly diminished at castanospermine levels of up to 1 mg/ml, but significant inhibition was observed at 2 mg/ml. .beta.-Galactosidase was intermediate in sensitivity. Cells were grown in the presence or absence of castanospermine and labeled with [2-3H]mannose, [6-3H]glucosamine, or [1-3H]galactose to label the sugar portion of the glycoproteins. The secreted glycoproteins were digested with pronase to obtain glycopeptides, and these were identified on Bio-Gel P-4 (Bio-Rad Laboratories). The glycopeptides were then digested with endoglucosaminidase H to release the peptide portion of susceptible structures, and the released **oligosaccharides** were reisolated and identified on Bio-Gel P-4. The **oligosaccharides** from control and castanospermine-grown cells were identified by a combination of enzymatic and chemical studies. In control cells, the **oligosaccharide** appeared to be mostly Man8GlcNAc and Man9GlcNAc, whereas in the presence of alkaloid, the major structures were Glc3Man7GlcNAc and Glc3Man8GlcNAc. These data fit previous observations that castanospermine inhibits glucosidase I.

=> d his

(FILE 'HOME' ENTERED AT 09:51:56 ON 21 JAN 2004)

FILE 'MEDLINE, EMBASE, BIOSIS, BIOTECHDS, SCISEARCH, HCAPLUS, NTIS, LIFESCI' ENTERED AT 09:53:31 ON 21 JAN 2004

L1	2031	S	BETA(A)GLYCOSIDASE?
L2	2	S	THREMOPHILIC
L3	188	S	L1 AND ASSAY?
L4	6329367	S	CLON? OR EXPRESS? OR RECOMBINANT
L5	141988	S	OLIGOSACCHARIDE OR HETEROSACCHARIDE
L6	24552	S	SYNTHESIS AND L5
L7	91	S	L1 AND L6
L8	16	S	L4 AND L7
L9	10		DUP REM L8 (6 DUPLICATES REMOVED)
L10	92		DUP REM L3 (96 DUPLICATES REMOVED)
L11	4	S	L10 AND L5

=> d l10 1-92 ibib

L10 ANSWER 1 OF 92 MEDLINE on STN DUPLICATE 1
ACCESSION NUMBER: 2003597297 IN-PROCESS
DOCUMENT NUMBER: PubMed ID: 14678161
TITLE: Effect of wine yeast monoculture practice on the biodiversity of non-Saccharomyces yeasts.
AUTHOR: Ganga M A; Martinez C
CORPORATE SOURCE: Centro de Estudios en Ciencia y Tecnologia de los Alimentos (CECTA) Departamento de Ciencia y Tecnologia de los Alimentos, Facultad Tecnologica, Universidad de Santiago de Chile, Chile.
SOURCE: Journal of applied microbiology, (2004) 96 (1) 76-83. Journal code: 9706280. ISSN: 1364-5072.
PUB. COUNTRY: England: United Kingdom
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: IN-DATA-REVIEW; IN-PROCESS; NONINDEXED; Priority Journals
ENTRY DATE: Entered STN: 20031218
Last Updated on STN: 20031218

L10 ANSWER 2 OF 92 BIOTECHDS COPYRIGHT 2004 THOMSON DERWENT/ISI on STN
ACCESSION NUMBER: 2003-10795 BIOTECHDS
TITLE: Novel isolated L-arabinose isomerase active enzyme derived from Thermoanaerobacter sp. capable of isomerizing D-galactose to D-tagatose, useful for producing D-tagatose; involving vector-mediated gene transfer and expression in host cell for use in aldose conversion and ketose and D-tagatose preparation
AUTHOR: HANSEN O C; JORGENSEN F; STOUGAARD P; BERTELSEN H; BOTTCHER K; CHRISTENSEN H J S; ERIKNAUER K
PATENT ASSIGNEE: BIOTEKNOLOGISK INST
PATENT INFO: WO 2003008593 30 Jan 2003
APPLICATION INFO: WO 2002-DK498 15 Jul 2002
PRIORITY INFO: US 2001-905108 16 Jul 2001; US 2001-305155 16 Jul 2001
DOCUMENT TYPE: Patent
LANGUAGE: English
OTHER SOURCE: WPI: 2003-239341 [23]

L10 ANSWER 3 OF 92 EMBASE COPYRIGHT 2004 ELSEVIER INC. ALL RIGHTS RESERVED. on STN
ACCESSION NUMBER: 2003081409 EMBASE
TITLE: Maillard reactions and increased enzyme inactivation during oligosaccharide synthesis by a hyperthermophilic glycosidase.
AUTHOR: Bruins M.E.; Van Hellemond E.W.; Janssen A.E.M.; Boom R.M.
CORPORATE SOURCE: M.E. Bruins, Department of Food Technology, Food/Bioprocess Engineering Group, Wageningen University, P.O. Box 8129, 6700 EV, Wageningen, Netherlands. Marieke.Bruins@Algemeen.pk.wau.nl
SOURCE: Biotechnology and Bioengineering, (5 Mar 2003) 81/5 (546-552). Refs: 21
ISSN: 0006-3592 CODEN: BIBIAU
COUNTRY: United States
DOCUMENT TYPE: Journal; Article
FILE SEGMENT: 004 Microbiology
LANGUAGE: English
SUMMARY LANGUAGE: English

L10 ANSWER 4 OF 92 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2002:293894 HCAPLUS
DOCUMENT NUMBER: 136:320313
TITLE: High throughput or capillary-based screening of libraries of compounds for biological activities

INVENTOR(S): Short, Jay M.; Keller, Martin; Lafferty, William Michael
PATENT ASSIGNEE(S): Diversa Corporation, USA
SOURCE: PCT Int. Appl., 229 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 40
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002031203	A2	20020418	WO 2001-US31806	20011010
WO 2002031203	C2	20030703		
WO 2002031203	A3	20030925		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
AU 756201	B2	20030109	AU 2000-48933	20000731
AU 2000048933	A5	20001005		
US 2001041333	A1	20011115	US 2000-738871	20001215
US 2002048809	A1	20020425	US 2001-790321	20010221
US 2002086279	A1	20020704	US 2001-875412	20010606
US 6677115	B2	20040113		
US 2002015997	A1	20020207	US 2001-894956	20010627
AU 2002011642	A5	20020422	AU 2002-11642	20011010
EP 1364052	A2	20031126	EP 2001-979708	20011010
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				

PRIORITY APPLN. INFO.:

US 2000-685432	A2	20001010
US 2000-738871	A2	20001215
US 2001-790321	A2	20010221
US 2001-894956	A2	20010627
US 2001-309101P	P	20010731
AU 1997-11489	A3	19961206
US 1997-876276	A2	19970616
US 1997-988224	A1	19971210
US 1998-98206	A2	19980616
US 1999-444112	A2	19991122
US 2000-636778	A2	20000811
US 2000-687219	A2	20001012
WO 2001-US31806	W	20011010

L10 ANSWER 5 OF 92 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2002:220779 HCAPLUS
DOCUMENT NUMBER: 136:258268
TITLE: Combinatorial screening of libraries from mixed populations of organisms for the identification of novel biologically active substances
INVENTOR(S): Short, Jay M.
PATENT ASSIGNEE(S): Diversa Corporation, USA
SOURCE: PCT Int. Appl., 154 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 40
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002022810	A2	20020321	WO 2001-US29712	20010917
WO 2002022810	A3	20030227		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

AU 756201	B2	20030109	AU 2000-48933	20000731
AU 2000048933	A5	20001005		
US 2002086279	A1	20020704	US 2001-875412	20010606
US 6677115	B2	20040113		
AU 2001091208	A5	20020326	AU 2001-91208	20010917
EP 1319068	A2	20030618	EP 2001-971309	20010917

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR

PRIORITY APPLN. INFO.:		
US 2000-663620	A2	20000915
AU 1997-11489	A3	19961206
US 1997-988224	A1	19971210
WO 2001-US29712	W	20010917

L10 ANSWER 6 OF 92 MEDLINE on STN DUPLICATE 2

ACCESSION NUMBER: 2002684329 MEDLINE

DOCUMENT NUMBER: 22313520 PubMed ID: 12213823

TITLE: SDS-resistant active and thermostable dimers are obtained from the dissociation of homotetrameric **beta-glycosidase** from hyperthermophilic Sulfolobus solfataricus in SDS. Stabilizing role of the A-C intermonomeric interface.

AUTHOR: Gentile Fabrizio; Amodeo Pietro; Febbraio Ferdinando; Picaro Francesco; Motta Andrea; Formisano Silvestro; Nucci Roberto

CORPORATE SOURCE: Istituto di Endocrinologia e Oncologia Sperimentale del CNR and Dipartimento di Biologia e Patologia Cellulare e Molecolare, Universita Federico II, Via Pansini 5, 80131 Napoli, Italy.

SOURCE: JOURNAL OF BIOLOGICAL CHEMISTRY, (2002 Nov 15) 277 (46) 44050-60.
Journal code: 2985121R. ISSN: 0021-9258.

PUB. COUNTRY: United States

DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)

LANGUAGE: English

FILE SEGMENT: Priority Journals

ENTRY MONTH: 200301

ENTRY DATE: Entered STN: 20021214
Last Updated on STN: 20030103
Entered Medline: 20030102

L10 ANSWER 7 OF 92 MEDLINE on STN DUPLICATE 3

ACCESSION NUMBER: 2003044459 MEDLINE

DOCUMENT NUMBER: 22441239 PubMed ID: 12553073

TITLE: Preparation of Gc protein-derived macrophage activating factor (GcMAF) and its structural characterization and biological activities.

AUTHOR: Mohamad Saharuddin Bin; Nagasawa Hideko; Uto Yoshihiro; Hori Hitoshi

CORPORATE SOURCE: Department of Biological Science and Technology, Faculty of Engineering, University of Tokushima, Minamijyosanjimacho-2, Tokushima, 770-8506 Japan.

SOURCE: ANTICANCER RESEARCH, (2002 Nov-Dec) 22 (6C) 4297-300.
Journal code: 8102988. ISSN: 0250-7005.
PUB. COUNTRY: Greece
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 200303
ENTRY DATE: Entered STN: 20030130
Last Updated on STN: 20030308
Entered Medline: 20030307

L10 ANSWER 8 OF 92 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN
DUPLICATE 4
ACCESSION NUMBER: 2002:526453 BIOSIS
DOCUMENT NUMBER: PREV200200526453
TITLE: The effects of long term nitrogen deposition on extracellular enzyme activity in an Acer saccharum forest soil.
AUTHOR(S): Saiya-Cork, K. R.; Sinsabaugh, R. L. [Reprint author]; Zak, D. R.
CORPORATE SOURCE: Environmental Sciences Department, University of Toledo, 2801 W. Bancroft Str., Toledo, OH, 43606-3390, USA robert.sinsabaugh@utoledo.edu
SOURCE: Soil Biology and Biochemistry, (September, 2002) Vol. 34, No. 9, pp. 1309-1315. print.
CODEN: SBIOAH. ISSN: 0038-0717.
DOCUMENT TYPE: Article
LANGUAGE: English
ENTRY DATE: Entered STN: 9 Oct 2002
Last Updated on STN: 9 Oct 2002

L10 ANSWER 9 OF 92 MEDLINE on STN DUPLICATE 5
ACCESSION NUMBER: 2002155516 MEDLINE
DOCUMENT NUMBER: 21823402 PubMed ID: 11835135
TITLE: Screening of various glycosidases for the synthesis of octyl glucoside.
AUTHOR: Ducret Amelie; Trani Michael; Lortie Robert
CORPORATE SOURCE: Microbial and Enzyme Technology Group, Bioprocess Sector, Biotechnology Research Institute, National Research Council, Montreal, Quebec H4P 2R2 Canada.
SOURCE: BIOTECHNOLOGY AND BIOENGINEERING, (2002 Mar 30) 77 (7) 752-7.
Journal code: 7502021. ISSN: 0006-3592.
PUB. COUNTRY: United States
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 200205
ENTRY DATE: Entered STN: 20020313
Last Updated on STN: 20020510
Entered Medline: 20020509

L10 ANSWER 10 OF 92 LIFESCI COPYRIGHT 2004 CSA on STN
ACCESSION NUMBER: 2003:24958 LIFESCI
TITLE: Antifungal effect of Hevea brasiliensis latex with various fungi. Its synergistic action with amphotericin B against Candida albicans
Antimyzetische Wirkung von Hevea brasiliensis -Latex auf verschiedene Pilze und seine synergistische Wirkung mit Amphotericin B auf Candida albicans
AUTHOR: Giordani, R.*; Regli, P.; Buc, J.
CORPORATE SOURCE: Faculte de Pharmacie, Universite de la Mediterranee, and Laboratoire de Chimie Bacterienne, UPR, CNRS, Marseille, France.

SOURCE: Mycoses, (20021200) vol. 45, no. 11-12, pp. 476-481. ISSN: 0933-7407.
DOCUMENT TYPE: Journal
FILE SEGMENT: K
LANGUAGE: English
SUMMARY LANGUAGE: English

L10 ANSWER 11 OF 92 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN
DUPLICATE 6
ACCESSION NUMBER: 2002:196155 BIOSIS
DOCUMENT NUMBER: PREV200200196155
TITLE: Secretion of **beta-glycosidase** by middle midgut cells and its recycling in the midgut of Tenebrio molitor larvae.
AUTHOR(S): Ferreira, A. H. P.; Ribeiro, A. F.; Terra, W. R.; Ferreira, C. [Reprint author]
CORPORATE SOURCE: Departamento de Bioquimica, Instituto de Quimica, Universidade de Sao Paulo, 05513-970, Sao Paulo, Brazil clfterra@iq.usp.br
SOURCE: Journal of Insect Physiology, (January, 2002) Vol. 48, No. 1, pp. 113-118. print. CODEN: JIPHAF. ISSN: 0022-1910.
DOCUMENT TYPE: Article
LANGUAGE: English
ENTRY DATE: Entered STN: 13 Mar 2002 Last Updated on STN: 13 Mar 2002

L10 ANSWER 12 OF 92 LIFESCI COPYRIGHT 2004 CSA on STN
ACCESSION NUMBER: 2002:114249 LIFESCI
TITLE: Comparative study of promoter activity of three anther-specific genes encoding lipid transfer protein, xyloglucan endotransglucosylase /hydrolase and polygalacturonase in transgenic Arabidopsis thaliana
AUTHOR: Ariizumi, T.; Amagai, M.; Shibata, D.; Hatakeyama, K.; Watanabe, M.; Toriyama, K.
CORPORATE SOURCE: Laboratory of Plant Breeding and Genetics, Graduate School of Agricultural Science, Tohoku University, Aoba-ku, Sendai 981-8555, Japan
SOURCE: Plant Cell Reports [Plant Cell Rep.], (20020700) vol. 21, no. 1, pp. 90-96. ISSN: 0721-7714.
DOCUMENT TYPE: Journal
FILE SEGMENT: G; W2
LANGUAGE: English
SUMMARY LANGUAGE: English

L10 ANSWER 13 OF 92 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN
ACCESSION NUMBER: 2003:165021 BIOSIS
DOCUMENT NUMBER: PREV200300165021
TITLE: Detection of a Beta-glucosidase in the Primate Lens: A Possible Mechanism of Age-related Yellowing.
AUTHOR(S): Dillon, J. P. [Reprint Author]; Ervin, L.; Gaillard, E. R.
CORPORATE SOURCE: Ophthalmology, Columbia University, New York, NY, USA
SOURCE: ARVO Annual Meeting Abstract Search and Program Planner, (2002) Vol. 2002, pp. Abstract No. 2390. cd-rom. Meeting Info.: Annual Meeting of the Association For Research in Vision and Ophthalmology. Fort Lauderdale, Florida, USA. May 05-10, 2002.
DOCUMENT TYPE: Conference; (Meeting) Conference; Abstract; (Meeting Abstract)
LANGUAGE: English
ENTRY DATE: Entered STN: 2 Apr 2003 Last Updated on STN: 2 Apr 2003

L10 ANSWER 14 OF 92 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN
ACCESSION NUMBER: 2002:210638 BIOSIS
DOCUMENT NUMBER: PREV200200210638
TITLE: **beta-glycosidase** from Sulfolobus solfataricus.
AUTHOR(S): Moracci, Marco [Reprint author]; Ciaramella, Maria; Rossi, Mose'
CORPORATE SOURCE: Institute of Protein Biochemistry and Enzymology, CNR, 80125, Naples, Italy
SOURCE: Adams, Michael W. W. [Editor]; Kelly, Robert M. [Editor]. Methods Enzymol., (2001) pp. 201-215. Methods in Enzymology. Hyperthermophilic enzymes: Part A. print. Publisher: Academic Press Inc., 525 B Street, Suite 1900, San Diego, CA, 92101-4495, USA; Academic Press Ltd., Harcourt Place, 32 Jamestown Road, London, NW1 7BY, UK. Series: Methods in Enzymology. CODEN: MENZAU. ISSN: 0076-6879. ISBN: 0-12-182231-1 (cloth).
DOCUMENT TYPE: Book
Book; (Book Chapter)
LANGUAGE: English
ENTRY DATE: Entered STN: 27 Mar 2002
Last Updated on STN: 27 Mar 2002

L10 ANSWER 15 OF 92 MEDLINE on STN DUPLICATE 7
ACCESSION NUMBER: 2001664347 MEDLINE
DOCUMENT NUMBER: 21551168 PubMed ID: 11522797
TITLE: Biochemical and structural assessment of the 1-N-azasugar GalNAc-isofagomine as a potent family 20 beta-N-acetylhexosaminidase inhibitor.
AUTHOR: Mark B L; Vocadlo D J; Zhao D; Knapp S; Withers S G; James M N
CORPORATE SOURCE: Department of Biochemistry, Canadian Institutes of Heath Research Group in Protein Structure and Function, University of Alberta, Edmonton, Alberta T6G 2H7, Canada.
SOURCE: JOURNAL OF BIOLOGICAL CHEMISTRY, (2001 Nov 9) 276 (45) 42131-7.
Journal code: 2985121R. ISSN: 0021-9258.
PUB. COUNTRY: United States
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
OTHER SOURCE: PDB-1HP4; PDB-1JAK
ENTRY MONTH: 200112
ENTRY DATE: Entered STN: 20011119
Last Updated on STN: 20030105
Entered Medline: 20011205

L10 ANSWER 16 OF 92 MEDLINE on STN DUPLICATE 8
ACCESSION NUMBER: 2001439983 MEDLINE
DOCUMENT NUMBER: 21378346 PubMed ID: 11485867
TITLE: Optimization of a yeast estrogen screen and its applicability to study the release of estrogenic isoflavones from a soygerm powder.
AUTHOR: De Boever P; Demare W; Vanderperren E; Cooreman K; Bossier P; Verstraete W
CORPORATE SOURCE: Laboratory of Microbial Ecology and Technology, Faculty of Agricultural and Applied Biological Sciences, Coupure links 653, 9500 Gent, Belgium.
SOURCE: ENVIRONMENTAL HEALTH PERSPECTIVES, (2001 Jul) 109 (7) 691-7.
Journal code: 0330411. ISSN: 0091-6765.
PUB. COUNTRY: United States
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)

(VALIDATION STUDIES)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 200110
ENTRY DATE: Entered STN: 20011015
Last Updated on STN: 20011015
Entered Medline: 20011011

L10 ANSWER 17 OF 92 EMBASE COPYRIGHT 2004 ELSEVIER INC. ALL RIGHTS RESERVED. on STN DUPLICATE 9
ACCESSION NUMBER: 2001350554 EMBASE
TITLE: Production of a lactose-free galacto-oligosaccharide mixture by using selective enzymatic oxidation of lactose into lactobionic acid.
AUTHOR: Splechtna B.; Petzelbauer I.; Baminger U.; Haltrich D.; Kulbe K.D.; Nidetzky B.
CORPORATE SOURCE: B. Nidetzky, Division of Biochemical Engineering, Institute of Food Technology, Univ. fur Bodenkultur Wien (BOKU), Muthgasse 18, A-1190 Wien, Vienna, Austria. nide@edv2.boku.ac.at
SOURCE: Enzyme and Microbial Technology, (4 Oct 2001) 29/6-7 (434-440).
Refs: 21
ISSN: 0141-0229 CODEN: EMTED2
PUBLISHER IDENT.: S 0141-0229(01)00412-4
COUNTRY: United States
DOCUMENT TYPE: Journal; Article
FILE SEGMENT: 004 Microbiology
LANGUAGE: English
SUMMARY LANGUAGE: English

L10 ANSWER 18 OF 92 EMBASE COPYRIGHT 2004 ELSEVIER INC. ALL RIGHTS RESERVED. on STN
ACCESSION NUMBER: 2001294989 EMBASE
TITLE: Synthesis of .beta.-D-glucosyl- and .beta.-D-fucosyl-glucoses using .**beta**.-**glycosidase** from Thermus thermophilus.
AUTHOR: Fourage L.; Colas B.
CORPORATE SOURCE: B. Colas, Unite de Rech. sur la Biocatalyse, CNRS 2230, Universite de Nantes, 2 rue de la Houssiniere BP 92208, 44322 Nantes Cedex 3, France. Bernar.Colas@chimbio.univ-nantes.fr
SOURCE: Applied Microbiology and Biotechnology, (2001) 56/3 (406-410).
Refs: 21
ISSN: 0175-7598 CODEN: AMBIDG
COUNTRY: Germany
DOCUMENT TYPE: Journal; Article
FILE SEGMENT: 004 Microbiology
LANGUAGE: English
SUMMARY LANGUAGE: English

L10 ANSWER 19 OF 92 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2001:125831 HCAPLUS
DOCUMENT NUMBER: 134:363126
TITLE: Characterization of .beta.-glycosylhydrolases from Pyrococcus furiosus
AUTHOR(S): Kaper, Thijs; Verhees, Corne H.; Lebbink, Joyce H. G.; Van Lieshout, Johan F. T.; Kluskens, Leon D.; Ward, Don E.; Kengen, Serve W. M.; Beerthuyzen, Marke M.; De Vos, Willem M.; Van der Oost, John
CORPORATE SOURCE: USA
SOURCE: Methods in Enzymology (2001), 330(Hyperthermophilic Enzymes, Part A), 329-346

CODEN: MENZAU; ISSN: 0076-6879
PUBLISHER: Academic Press
DOCUMENT TYPE: Journal
LANGUAGE: English
REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 20 OF 92 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2001:125821 HCAPLUS
DOCUMENT NUMBER: 134:322444
TITLE: .**beta**.-**Glycosidase** from Sulfolobus solfataricus
AUTHOR(S): Moracci, Marco; Ciaramella, Maria; Rossi, Mose
CORPORATE SOURCE: USA
SOURCE: Methods in Enzymology (2001), 330(Hyperthermophilic Enzymes, Part A), 201-215
CODEN: MENZAU; ISSN: 0076-6879
PUBLISHER: Academic Press
DOCUMENT TYPE: Journal
LANGUAGE: English
REFERENCE COUNT: 32 THERE ARE 32 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 21 OF 92 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2000:14961 HCAPLUS
DOCUMENT NUMBER: 132:73622
TITLE: Methods for inhibiting transcription-enhancer factor TEF-3 activity for treatment of matrix metalloprotease-mediated diseases
INVENTOR(S): Tindal, Michael Howard; Wang, Richard Lee
PATENT ASSIGNEE(S): Procter and Gamble Company, USA
SOURCE: PCT Int. Appl., 31 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000000161	A2	20000106	WO 1999-US14829	19990630
WO 2000000161	A3	20010104		
W: AE, AL, AM, AT, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, CZ, DE, DE, DK, DK, EE, EE, ES, FI, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
AU 9950866	A1	20000117	AU 1999-50866	19990630
EP 1089794	A2	20010411	EP 1999-935376	19990630
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, PT, IE, FI				
NO 2000006198	A	20010228	NO 2000-6198	20001206

PRIORITY APPLN. INFO.: US 1998-91318P P 19980630
WO 1999-US14829 W 19990630

L10 ANSWER 22 OF 92 BIOTECHDS COPYRIGHT 2004 THOMSON DERWENT/ISI on STN
ACCESSION NUMBER: 2000-11399 BIOTECHDS
TITLE: Transgalactosylation by thermostable **beta-glycosidases** from Pyrococcus furiosus and Sulfolobus solfataricus binding interactions of nucleophiles with the galactosylated enzyme intermediate;

make major contributions to the formation of new beta-glycosides during lactose conversion; enzyme catalyzed sugar conversion

AUTHOR: Petzelbauer I; Reiter A; Splechtna B; Kosma P; *Nidetzky B
CORPORATE SOURCE: Univ.Vienna-Agr.Inst.Food-Technol.; Univ.Vienna-Inst.Chem.
LOCATION: Institut fur Lebensmitteltechnologie, Universitat fur Bodenkultur, Muthgasse 18, A-1190 Vienna, Austria. Email: nide@edv2.boku.ac.at
SOURCE: Eur.J.Biochem.; (2000) 267, 16, 5055-66
CODEN: EJBCAI
ISSN: 0014-2956
DOCUMENT TYPE: Journal
LANGUAGE: English

L10 ANSWER 23 OF 92 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN
DUPLICATE 10
ACCESSION NUMBER: 2001:80596 BIOSIS
DOCUMENT NUMBER: PREV200100080596
TITLE: Health promoting effects of a soy product enriched in phytoestrogens.
AUTHOR(S): De Boever, P. [Reprint author]; Verstraete, W. [Reprint author]
CORPORATE SOURCE: Laboratory of Microbial Ecology and Technology (Labmet) Faculty of Agricultural and Applied Biological Sciences, Ghent University, Coupure links 653, B-9000, Ghent, Belgium willy.verstraete@rug.ac.be; http://www.welcome.to/labmet
SOURCE: Mededelingen Faculteit Landbouwkundige en Toegepaste Biologische Wetenschappen Universiteit Gent, (2000) Vol. 65, No. 3B, pp. 487-493. print.
DOCUMENT TYPE: Article
LANGUAGE: English
ENTRY DATE: Entered STN: 14 Feb 2001
Last Updated on STN: 12 Feb 2002

L10 ANSWER 24 OF 92 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2000:308447 HCAPLUS
DOCUMENT NUMBER: 133:205440
TITLE: The role of ethylene in regulating cell wall-degrading enzyme activity using antisense ACC-oxidase in cantaloupe melons
AUTHOR(S): Botondi, Rinaldo; Cardarelli, Maria Teresa; Mencarelli, Fabio
CORPORATE SOURCE: Istituto di Tecnologia Agroalimentaria, Viterbo, 01100, Italy
SOURCE: Acta Horticulturae (2000), 510(Proceedings of Cucurbitaceae 2000), 471-477
CODEN: AHORA2; ISSN: 0567-7572
PUBLISHER: International Society for Horticultural Science
DOCUMENT TYPE: Journal
LANGUAGE: English
REFERENCE COUNT: 17 THERE ARE 17 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 25 OF 92 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN
DUPLICATE 11
ACCESSION NUMBER: 2000:204471 BIOSIS
DOCUMENT NUMBER: PREV200000204471
TITLE: Metamorphosis-associated proteolysis in Ceratitis capitata.
AUTHOR(S): Rabossi, A.; Acion, L.; Quesada-Allue, L. A. [Reprint author]
CORPORATE SOURCE: Fundacion Campomar and Facultad de Ciencias Exactas y Naturales, Instituto de Investigaciones Bioquimicas, Universidad de Bs. Aires, Av. Patricias Argentinas 435, Buenos Aires, 1405, Argentina

SOURCE: Entomologia Experimentalis et Applicata, (Jan., 2000) Vol. 94, No. 1, pp. 57-65. print.
CODEN: ETEAAT. ISSN: 0013-8703.
DOCUMENT TYPE: Article
LANGUAGE: English
ENTRY DATE: Entered STN: 24 May 2000
Last Updated on STN: 5 Jan 2002

L10 ANSWER 26 OF 92 EMBASE COPYRIGHT 2004 ELSEVIER INC. ALL RIGHTS RESERVED. on STN
ACCESSION NUMBER: 1999223386 EMBASE
TITLE: Coordinate transcriptional control in the hyperthermophilic archaeon Sulfolobus solfataricus.
AUTHOR: Haseltine C.; Montalvo-Rodriguez R.; Bini E.; Carl A.; Blum P.
CORPORATE SOURCE: P. Blum, E234 Beadle Cntr., University of Nebraska, Lincoln, NE 68588-0666, United States.
pblum@biocomp.unl.edu
SOURCE: Journal of Bacteriology, (1999) 181/13 (3920-3927).
Refs: 52
ISSN: 0021-9193 CODEN: JOBAAY
COUNTRY: United States
DOCUMENT TYPE: Journal; Article
FILE SEGMENT: 004 Microbiology
LANGUAGE: English
SUMMARY LANGUAGE: English

L10 ANSWER 27 OF 92 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1999:639475 HCAPLUS
DOCUMENT NUMBER: 132:1486
TITLE: Probing the transferase activity of glycosidases by means of in situ NMR spectroscopy
AUTHOR(S): Spangenberg, P.; Chiffoleau-Giraud, V.; Andre, C.; Dion, M.; Rabiller, C.
CORPORATE SOURCE: Unite de Recherches en Biocatalyse (UPRES no. 2161), Faculte des Sciences et des Techniques, Nantes, F-44322, Fr.
SOURCE: Tetrahedron: Asymmetry (1999), 10(15), 2905-2912
CODEN: TASYE3; ISSN: 0957-4166
PUBLISHER: Elsevier Science Ltd.
DOCUMENT TYPE: Journal
LANGUAGE: English
REFERENCE COUNT: 19 THERE ARE 19 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 28 OF 92 MEDLINE on STN DUPLICATE 12
ACCESSION NUMBER: 1999359410 MEDLINE
DOCUMENT NUMBER: 99359410 PubMed ID: 10430566
TITLE: Extragenic pleiotropic mutations that repress glycosyl hydrolase expression in the hyperthermophilic archaeon Sulfolobus solfataricus.
AUTHOR: Haseltine C; Montalvo-Rodriguez R; Carl A; Bini E; Blum P
CORPORATE SOURCE: George Beadle Center for Genetics, School of Biological Sciences, University of Nebraska, Lincoln, Nebraska 68588-0666, USA.
SOURCE: GENETICS, (1999 Aug) 152 (4) 1353-61.
Journal code: 0374636. ISSN: 0016-6731.
PUB. COUNTRY: United States
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals; Space Life Sciences
OTHER SOURCE: GENBANK-AF148510
ENTRY MONTH: 199910
ENTRY DATE: Entered STN: 19991026

Last Updated on STN: 19991026
Entered Medline: 19991012

L10 ANSWER 29 OF 92 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN
ACCESSION NUMBER: 1999:490462 BIOSIS
DOCUMENT NUMBER: PREV199900490462
TITLE: beta-Galactooligosaccharide synthesis with beta-galactosidases from Sulfolobus solfataricus, Aspergillus oryzae, and Escherichia coli.
AUTHOR(S): Reuter, Stephan; Nygaard, Anne Rusborg; Zimmermann, Wolfgang [Reprint author]
CORPORATE SOURCE: Biotechnology Laboratory, University of Aalborg, Sohngaardsholmsvej 57, DK-9000, Aalborg, Denmark
SOURCE: Enzyme and Microbial Technology, (Sept., 1999) Vol. 25, No. 6, pp. 509-516. print.
CODEN: EMTED2. ISSN: 0141-0229.
DOCUMENT TYPE: Article
LANGUAGE: English
ENTRY DATE: Entered STN: 16 Nov 1999
Last Updated on STN: 16 Nov 1999

L10 ANSWER 30 OF 92 EMBASE COPYRIGHT 2004 ELSEVIER INC. ALL RIGHTS RESERVED. on STN
ACCESSION NUMBER: 1999088403 EMBASE
TITLE: Variation in glycosidase activity in soluble fractions in ICR/f rat lenses with the progression of cataract formation.
AUTHOR: Kamei A.
CORPORATE SOURCE: A. Kamei, Department of Biochemistry, Faculty of Pharmaceutical Sciences, Meijo University, 150 Yagotoyama, Tenpaku-ku, Nagoya 468-8503, Japan
SOURCE: Biological and Pharmaceutical Bulletin, (1999) 22/2 (200-202).
Refs: 8
ISSN: 0918-6158 CODEN: BPBLEO
COUNTRY: Japan
DOCUMENT TYPE: Journal; Article
FILE SEGMENT: 012 Ophthalmology
030 Pharmacology
LANGUAGE: English
SUMMARY LANGUAGE: English

L10 ANSWER 31 OF 92 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1999:140672 HCAPLUS
DOCUMENT NUMBER: 130:308568
TITLE: Picomolar scale determination of carbohydrates covalently immobilized on activated beads using hydroxyl functionality
AUTHOR(S): Yu, Jaehoon; Chun, Sung-Min; Park, Hokoon; Park, Yong-Keun; Jeong, Sunjoo
CORPORATE SOURCE: Division of Applied Science, The Korea Institute of Science & Technology, Seoul, 130-650, S. Korea
SOURCE: Journal of Biochemistry and Molecular Biology (1999), 32(1), 98-102
CODEN: JBMBE5; ISSN: 1225-8687
PUBLISHER: Springer-Verlag Singapore Pte. Ltd.
DOCUMENT TYPE: Journal
LANGUAGE: English
REFERENCE COUNT: 20 THERE ARE 20 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 32 OF 92 MEDLINE on STN DUPLICATE 13
ACCESSION NUMBER: 1999449953 MEDLINE
DOCUMENT NUMBER: 99449953 PubMed ID: 10520250

TITLE: The **beta-glycosidase** from the hyperthermophilic archaeon Sulfolobus solfataricus: enzyme activity and conformational dynamics at temperatures above 100 degrees C.
AUTHOR: D'Auria S; Nucci R; Rossi M; Gryczynski I; Gryczynski Z; Lakowicz J R
CORPORATE SOURCE: Institute of Protein Biochemistry and Enzymology, C.N.R., Napoli, Italy.
CONTRACT NUMBER: RR-08119 (NCRR)
SOURCE: BIOPHYSICAL CHEMISTRY, (1999 Sep 13) 81 (1) 23-31.
Journal code: 0403171. ISSN: 0301-4622.
PUB. COUNTRY: Netherlands
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199911
ENTRY DATE: Entered STN: 20000111
Last Updated on STN: 20000111
Entered Medline: 19991105

L10 ANSWER 33 OF 92 SCISEARCH COPYRIGHT 2004 THOMSON ISI on STN
ACCESSION NUMBER: 1998:912037 SCISEARCH
THE GENUINE ARTICLE: 141WE
TITLE: Selenium-mediated differential response of beta-glucosidase and beta-galactosidase of germinating Trigonella foenum-graecum
AUTHOR: Sreekala M; Lalitha K (Reprint)
CORPORATE SOURCE: INDIAN INST TECHNOL, DEPT CHEM, MADRAS, CHENNAI, INDIA (Reprint); INDIAN INST TECHNOL, DEPT CHEM, MADRAS, CHENNAI, INDIA
COUNTRY OF AUTHOR: INDIA
SOURCE: BIOLOGICAL TRACE ELEMENT RESEARCH, (SUM 1998) Vol. 64, No. 1-3, pp. 247-258.
Publisher: HUMANA PRESS INC, 999 RIVERVIEW DRIVE SUITE 208, TOTOWA, NJ 07512.
ISSN: 0163-4984.
DOCUMENT TYPE: Article; Journal
FILE SEGMENT: LIFE
LANGUAGE: English
REFERENCE COUNT: 35
ABSTRACT IS AVAILABLE IN THE ALL AND IALL FORMATS

L10 ANSWER 34 OF 92 EMBASE COPYRIGHT 2004 ELSEVIER INC. ALL RIGHTS RESERVED.
on STN DUPLICATE 14
ACCESSION NUMBER: 1998072100 EMBASE
TITLE: Substrate specificities of midgut .**beta**.-**glycosidases** from insects of different orders.
AUTHOR: Ferreira C.; Torres B.B.; Terra W.R.
CORPORATE SOURCE: C. Ferreira, Departamento de Bioquimica, Instituto de Quimica, Universidade de Sao Paulo, C.P. 26077, 05599-970, Sao Paulo, Brazil. clfterra@quim.iq.usp.br
SOURCE: Comparative Biochemistry and Physiology - B Biochemistry and Molecular Biology, (1998) 119/1 (219-225).
Refs: 26
ISSN: 0305-0491 CODEN: CBPBB8
PUBLISHER IDENT.: S 0305-0491(97)00310-6
COUNTRY: United States
DOCUMENT TYPE: Journal; Article
FILE SEGMENT: 004 Microbiology
029 Clinical Biochemistry
LANGUAGE: English
SUMMARY LANGUAGE: English

L10 ANSWER 35 OF 92 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN

ACCESSION NUMBER: 1998:318393 BIOSIS
DOCUMENT NUMBER: PREV199800318393
TITLE: The arbZ gene from Lactobacillus delbrueckii subsp. lactis confers to Escherichia coli the ability to utilize the beta-glucoside arbutin.
AUTHOR(S): Weber, Beate A. [Reprint author]; Klein, Juergen R.; Henrich, Bernhard
CORPORATE SOURCE: Fachbereich Biol., Abt. Mikrobiol., Univ. Kaiserslautern, Postfach 3049, D-67653 Kaiserslautern, Germany
SOURCE: Gene (Amsterdam), (June 8, 1998) Vol. 212, No. 2, pp. 203-211. print.
CODEN: GENED6. ISSN: 0378-1119.
DOCUMENT TYPE: Article
LANGUAGE: English
OTHER SOURCE: EMBL-Z86115; DDBJ-Z86115
ENTRY DATE: Entered STN: 22 Jul 1998
Last Updated on STN: 10 Sep 1998

L10 ANSWER 36 OF 92 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN
ACCESSION NUMBER: 1998:186132 BIOSIS
DOCUMENT NUMBER: PREV199800186132
TITLE: **beta-Glycosidase** (amygdalas and linamarase) from Endomyces fibuliger (LU677): Formation and crude enzyme properties.
AUTHOR(S): Brimer, L. [Reprint author]; Nout, M. J. R.; Tuncel, G.
CORPORATE SOURCE: Dep. Pharmacol. and Pathobiol., Sect. Pharmacol. and Toxicol., Royal Vet. and Agric. Univ., 13 Bulowsvej, DK-1870 Frederiksberg C, Copenhagen, Denmark
SOURCE: Applied Microbiology and Biotechnology, (Feb., 1998) Vol. 49, No. 2, pp. 184-188. print.
CODEN: AMBIDG. ISSN: 0175-7598.
DOCUMENT TYPE: Article
LANGUAGE: English
ENTRY DATE: Entered STN: 20 Apr 1998
Last Updated on STN: 12 Aug 1998

L10 ANSWER 37 OF 92 MEDLINE on STN DUPLICATE 15
ACCESSION NUMBER: 1998195748 MEDLINE
DOCUMENT NUMBER: 98195748 PubMed ID: 9534258
TITLE: **Beta-glycosidase** (amygdalase and linamarase) from Endomyces fibuliger (LU677): formation and crude enzyme properties.
AUTHOR: Brimer L; Nout M J; Tuncel G
CORPORATE SOURCE: Department of Pharmacology and Pathobiology, Royal Veterinary and Agricultural University, Copenhagen, Denmark.
SOURCE: APPLIED MICROBIOLOGY AND BIOTECHNOLOGY, (1998 Feb) 49 (2) 182-8.
Journal code: 8406612. ISSN: 0175-7598.
PUB. COUNTRY: GERMANY: Germany, Federal Republic of
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Biotechnology
ENTRY MONTH: 199804
ENTRY DATE: Entered STN: 19980507
Last Updated on STN: 19980507
Entered Medline: 19980429

L10 ANSWER 38 OF 92 EMBASE COPYRIGHT 2004 ELSEVIER INC. ALL RIGHTS RESERVED. on STN
ACCESSION NUMBER: 97383128 EMBASE
DOCUMENT NUMBER: 1997383128
TITLE: Evaluation of the activities of eight lysosomal hydrolases in sera of humans, rats and pigs of different ages.

AUTHOR: Sanchez-Martin M.M.; Cabezas J.A.
CORPORATE SOURCE: J.A. Cabezas, Departamento de Bioquimica, y Biologia Molecular, Facultad de Biologia, Avendida del Campo Charro s-n, E-37077 Salamanca, Spain. jcabezas@gugu.usal.es
SOURCE: Mechanisms of Ageing and Development, (1998) 99/2 (95-107). Refs: 41
ISSN: 0047-6374 CODEN: MAGDA3
COUNTRY: Ireland
DOCUMENT TYPE: Journal; Article
FILE SEGMENT: 021 Developmental Biology and Teratology
029 Clinical Biochemistry
LANGUAGE: English
SUMMARY LANGUAGE: English

L10 ANSWER 39 OF 92 MEDLINE on STN
ACCESSION NUMBER: 1999092668 MEDLINE
DOCUMENT NUMBER: 99092668 PubMed ID: 9875509
TITLE: Intestinal bacterial metabolism of flavonoids and its relation to some biological activities.
AUTHOR: Kim D H; Jung E A; Sohng I S; Han J A; Kim T H; Han M J
CORPORATE SOURCE: College of Pharmacy, Kyung-Hee University, Seoul, Korea.
SOURCE: ARCHIVES OF PHARMACAL RESEARCH, (1998 Feb) 21 (1) 17-23. Journal code: 8000036. ISSN: 0253-6269.
PUB. COUNTRY: KOREA
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199903
ENTRY DATE: Entered STN: 19990324
Last Updated on STN: 19990324
Entered Medline: 19990305

L10 ANSWER 40 OF 92 EMBASE on STN
ACCESSION NUMBER: 1998001858 EMBASE
TITLE: Affinity isolation and characterization of the cathepsin B-like proteinase Sj31 from Schistosoma japonicum.
AUTHOR: Caffrey C.R.; Ruppel A.
CORPORATE SOURCE: A. Ruppel, Institute of Tropical Hygiene, University of Heidelberg, Im Neuenheimer Feld 324, 69120 Heidelberg, Germany
SOURCE: Journal of Parasitology, (1997) 83/6 (1112-1118). Refs: 48
ISSN: 0022-3395 CODEN: JOPAA2
COUNTRY: United States
DOCUMENT TYPE: Journal; Article
FILE SEGMENT: 004 Microbiology
LANGUAGE: English
SUMMARY LANGUAGE: English

L10 ANSWER 41 OF 92 MEDLINE on STN DUPLICATE 16
ACCESSION NUMBER: 1998098701 MEDLINE
DOCUMENT NUMBER: 98098701 PubMed ID: 9436306
TITLE: Isolation, purification, and characterization of the major autolysin from Pseudomonas aeruginosa.
AUTHOR: Watt S R; Clarke A J
CORPORATE SOURCE: Canadian Bacterial Diseases Network, Department of Microbiology, University of Guelph, Canada.
SOURCE: CANADIAN JOURNAL OF MICROBIOLOGY, (1997 Nov) 43 (11) 1054-62.
Journal code: 0372707. ISSN: 0008-4166.
PUB. COUNTRY: Canada
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English

FILE SEGMENT: Priority Journals
ENTRY MONTH: 199802
ENTRY DATE: Entered STN: 19980306
Last Updated on STN: 20000303
Entered Medline: 19980220

L10 ANSWER 42 OF 92 MEDLINE on STN DUPLICATE 17
ACCESSION NUMBER: 97436796 MEDLINE
DOCUMENT NUMBER: 97436796 PubMed ID: 9291478
TITLE: Glycosidases are present on the surface of Drosophila melanogaster spermatozoa.
AUTHOR: Cattaneo F; Pasini M E; Perotti M E
CORPORATE SOURCE: Department of General Physiology and Biochemistry, University of Milan, Italy.
SOURCE: MOLECULAR REPRODUCTION AND DEVELOPMENT, (1997 Oct) 48 (2) 276-81.
Journal code: 8903333. ISSN: 1040-452X.
PUB. COUNTRY: United States
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199712
ENTRY DATE: Entered STN: 19980109
Last Updated on STN: 19980109
Entered Medline: 19971202

L10 ANSWER 43 OF 92 MEDLINE on STN DUPLICATE 18
ACCESSION NUMBER: 1998144479 MEDLINE
DOCUMENT NUMBER: 98144479 PubMed ID: 9483485
TITLE: Evaluation of the activities of eight lysosomal hydrolases in sera of humans, rats and pigs of different ages.
AUTHOR: Sanchez-Martin M M; Cabezas J A
CORPORATE SOURCE: Departamento de Bioquimica y Biologia Molecular, Facultad de Biologia, Salamanca, Spain.
SOURCE: MECHANISMS OF AGEING AND DEVELOPMENT, (1997 Dec 15) 99 (2) 95-107.
Journal code: 0347227. ISSN: 0047-6374.
PUB. COUNTRY: Ireland
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199803
ENTRY DATE: Entered STN: 19980407
Last Updated on STN: 19980407
Entered Medline: 19980326

L10 ANSWER 44 OF 92 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1996:703733 HCAPLUS
DOCUMENT NUMBER: 126:18002
TITLE: Molecular basis of alcoholic aroma formation in tea leaves
AUTHOR(S): Sakata, Kanzo; Ogawa, Kenji; Ijima, Yasuyuki; Watanabe, Naoharu; Usui, Taiichi; Guo, Wenfei; Moon, Jae-Hak; Dong, Shangsheng; Tong, Qiqing; Luo, Shaojun
CORPORATE SOURCE: Faculty Agriculture, Shizuoka University, Japan
SOURCE: Tennen Yuki Kagobutsu Toronkai Koen Yoshishu (1996), 38th, 511-516
CODEN: TYKYDS
PUBLISHER: Nippon Kagakkai
DOCUMENT TYPE: Journal
LANGUAGE: English

L10 ANSWER 45 OF 92 BIOTECHDS COPYRIGHT 2004 THOMSON DERWENT/ISI on STN
ACCESSION NUMBER: 1997-06264 BIOTECHDS

TITLE: Immobilization on chitosan of a thermophilic **beta-glycosidase** expressed in Saccharomyces cerevisiae; Sulfolobus solfataricus thermostable enzyme immobilization and expression in yeast (conference paper)
AUTHOR: d'Auria S; Pellino F; La Cara F; Barone R; Rossi M; *Nucci R
CORPORATE SOURCE: Inst.Protein-Biochem.Enzymol.Naples; CNR
LOCATION: Instituto di Biochimica delle Proteine ed Enzimologia, C.N.R., Via Marconi 10, 80125 Naples, Italy.
SOURCE: Appl.Biochem.Biotechnol.; (1996) 61, 1-2, 157-66
CODEN: ABIBDL
ISSN: 0273-2289
Biocatalysis 95', Proceedings of the International Conference, Suzdal, Russia, 28 August-1 September, 1995.
DOCUMENT TYPE: Journal
LANGUAGE: English

L10 ANSWER 46 OF 92 MEDLINE on STN DUPLICATE 19
ACCESSION NUMBER: 96031595 MEDLINE
DOCUMENT NUMBER: 96031595 PubMed ID: 7574621
TITLE: Possible errors in **assay** for **beta-glycosidase** activity.
AUTHOR: Chadwick R W; Allison J C; Talley D L; George S E
CORPORATE SOURCE: Health Effects Research Laboratory, U.S. Environmental Protection Agency, Research Triangle Park, North Carolina 27711, USA.
SOURCE: APPLIED AND ENVIRONMENTAL MICROBIOLOGY, (1995 Feb) 61 (2) 820-2.
Journal code: 7605801. ISSN: 0099-2240.
PUB. COUNTRY: United States
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199511
ENTRY DATE: Entered STN: 19951227
Last Updated on STN: 19951227
Entered Medline: 19951106

L10 ANSWER 47 OF 92 EMBASE COPYRIGHT 2004 ELSEVIER INC. ALL RIGHTS RESERVED. on STN
ACCESSION NUMBER: 95109156 EMBASE
DOCUMENT NUMBER: 1995109156
TITLE: Cellulolytic vestiges of the xylanase activity in a new strictly xylanolytic, thermophilic Clostridium sp.
AUTHOR: De Blois S.; Wiegel J.
CORPORATE SOURCE: Dept. of Microbiology, Ctr. Biological Resource Recovery, Univ. of Georgia,Athens, GA 30602, United States
SOURCE: Biotechnology Letters, (1995) 17/1 (89-94).
ISSN: 0141-5492 CODEN: BILED3
COUNTRY: United Kingdom
DOCUMENT TYPE: Journal; Article
FILE SEGMENT: 004 Microbiology
LANGUAGE: English
SUMMARY LANGUAGE: English

L10 ANSWER 48 OF 92 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN
ACCESSION NUMBER: 1994:125641 BIOSIS
DOCUMENT NUMBER: PREV199497138641
TITLE: Prokaryotic expression cloning of a novel human tyrosine kinase.
AUTHOR(S): Beeler, John F.; Larochelle, William J. [Reprint author]; Chedid, Marcio; Tronick, Steven R.; Aaronson, Stuart A.
CORPORATE SOURCE: Lab. Cellular and Mol. Biol., Natl. Cancer Inst., Build. 37, Room 1E24, Bethesda, MD 20892, USA
SOURCE: Molecular and Cellular Biology, (1994) Vol. 14, No. 2, pp.

982-988.
CODEN: MCEBD4. ISSN: 0270-7306.
DOCUMENT TYPE: Article
LANGUAGE: English
ENTRY DATE: Entered STN: 24 Mar 1994
Last Updated on STN: 25 Mar 1994

L10 ANSWER 49 OF 92 MEDLINE on STN
ACCESSION NUMBER: 94238419 MEDLINE
DOCUMENT NUMBER: 94238419 PubMed ID: 8182502
TITLE: Changes in synovial fluid N-acetyl-beta-glucosaminidase activity in the human temporomandibular joint with dysfunction.
AUTHOR: Kamada A; Fujita A; Kakudo K; Okazaki J; Ida M; Sakaki T
CORPORATE SOURCE: Department of Biochemistry, Osaka Dental University, Japan.
SOURCE: JOURNAL OF OSAKA DENTAL UNIVERSITY, (1993 Oct) 27 (2) 107-11.
Journal code: 7507225. ISSN: 0475-2058.
PUB. COUNTRY: Japan
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Dental Journals
ENTRY MONTH: 199406
ENTRY DATE: Entered STN: 19940621
Last Updated on STN: 19970203
Entered Medline: 19940615

L10 ANSWER 50 OF 92 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1993:622449 HCAPLUS
DOCUMENT NUMBER: 119:222449
TITLE: Variable expression of leukocyte cytosolic broad-specificity .beta.-glucosidase activity
AUTHOR(S): Forsyth, G. W.; Romero, K. M.; Alverson, J.; VanderJagt, D. J.; Glew, R. H.
CORPORATE SOURCE: Univ. Saskatchewan, Saskatoon, SK, S7N OWO, Can.
SOURCE: Clinica Chimica Acta (1993), 216(1-2), 11-21
CODEN: CCATAR; ISSN: 0009-8981
DOCUMENT TYPE: Journal
LANGUAGE: English

L10 ANSWER 51 OF 92 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN DUPLICATE 20
ACCESSION NUMBER: 1993:2721 BIOSIS
DOCUMENT NUMBER: PREV199395002721
TITLE: Epilithic extracellular enzyme activity in acid and calcareous headstreams.
AUTHOR(S): Chappell, K. R.; Goulder, R.
CORPORATE SOURCE: Dep. Applied Biology, Univ. Hull, Hull HU6 7RX, England
SOURCE: Archiv fuer Hydrobiologie, (1992) Vol. 125, No. 2, pp. 129-148.
CODEN: AHYBA4. ISSN: 0003-9136.
DOCUMENT TYPE: Article
LANGUAGE: English
ENTRY DATE: Entered STN: 10 Dec 1992
Last Updated on STN: 13 Dec 1992

L10 ANSWER 52 OF 92 EMBASE COPYRIGHT 2004 ELSEVIER INC. ALL RIGHTS RESERVED. on STN DUPLICATE 21
ACCESSION NUMBER: 91215942 EMBASE
DOCUMENT NUMBER: 1991215942
TITLE: Activities of .beta.-glucanases and .beta.-glucosidases during blastospore formation in Saccharomycopsis fibuligera.
AUTHOR: Nwoguh C.E.; Berry D.R.

CORPORATE SOURCE: Dept.of Bioscience/Biotechnol., University of Strathclyde, 204 George Street,Glasgow G1 1XW, United Kingdom
SOURCE: Journal of Industrial Microbiology, (1991) 7/4 (263-268). ISSN: 0169-4146 CODEN: JIMIE7
COUNTRY: Netherlands
DOCUMENT TYPE: Journal; Article
FILE SEGMENT: 004 Microbiology
LANGUAGE: English
SUMMARY LANGUAGE: English

L10 ANSWER 53 OF 92 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN
DUPLICATE 22
ACCESSION NUMBER: 1990:244076 BIOSIS
DOCUMENT NUMBER: PREV199089131029; BA89:131029
TITLE: INHIBITION OF CELL WALL-ASSOCIATED ENZYMES IN-VITRO AND IN-VIVO WITH SUGAR ANALOGS.
AUTHOR(S): NAGAHASHI G [Reprint author]; TU S-I; FLEET G; NAMGOONG S K
CORPORATE SOURCE: US DEP AGRIC, AGRIC RES SERVICE, EASTERN REGIONAL RES CENTER, 600 EAST MERMAID LANE, PHILADELPHIA, PA 19118, USA
SOURCE: Plant Physiology (Rockville), (1990) Vol. 92, No. 2, pp. 413-418.
CODEN: PLPHAY. ISSN: 0032-0889.
DOCUMENT TYPE: Article
FILE SEGMENT: BA
LANGUAGE: ENGLISH
ENTRY DATE: Entered STN: 19 May 1990
Last Updated on STN: 19 May 1990

L10 ANSWER 54 OF 92 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1990:194262 HCAPLUS
DOCUMENT NUMBER: 112:194262
TITLE: .beta.-D-Glycosidase activities of Humicola grisea: biochemical and kinetic characterization of a multifunctional enzyme
AUTHOR(S): Peralta, Rosane Marina; Terenzi, Hector Francisco; Jorge, Joao Atilio
CORPORATE SOURCE: Fac. Filos. Cienc. Let., Univ. Sao Paulo, Ribeirao Preto, 14049, Brazil
SOURCE: Biochimica et Biophysica Acta (1990), 1033(3), 243-9
CODEN: BBACAQ; ISSN: 0006-3002
DOCUMENT TYPE: Journal
LANGUAGE: English

L10 ANSWER 55 OF 92 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1990:473466 HCAPLUS
DOCUMENT NUMBER: 113:73466
TITLE: The characteristics of .beta.-glucosidase of chorionic villi and its fluorometric determination
AUTHOR(S): Wang, Jianzhi; He, Shanshu
CORPORATE SOURCE: Tonji Med. Univ., Wuhan, Peop. Rep. China
SOURCE: Shengwu Huaxue Zazhi (1990), 6(2), 102-6
CODEN: SHZAE4; ISSN: 1000-8543
DOCUMENT TYPE: Journal
LANGUAGE: Chinese

L10 ANSWER 56 OF 92 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN
ACCESSION NUMBER: 1990:49098 BIOSIS
DOCUMENT NUMBER: PREV199089026462; BA89:26462
TITLE: BETA-N ACETYLHEXOSAMINIDASES IN THE SECRETION OF THE FEMALE REPRODUCTIVE ACCESSORY GLANDS OF CERATITIS-CAPITATA DIPTERA.
AUTHOR(S): MARCHINI D [Reprint author]; BERNINI L F; DALLAI R
CORPORATE SOURCE: DEP EVOL BIOL, UNIV SIENA, I-53100 SIENA, ITALY
SOURCE: Insect Biochemistry, (1989) Vol. 19, No. 6, pp. 549-556.

CODEN: ISBCAN. ISSN: 0020-1790.
DOCUMENT TYPE: Article
FILE SEGMENT: BA
LANGUAGE: ENGLISH
ENTRY DATE: Entered STN: 11 Jan 1990
Last Updated on STN: 27 Feb 1990

L10 ANSWER 57 OF 92 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1989:53412 HCAPLUS
DOCUMENT NUMBER: 110:53412
TITLE: In situ **assay** of intracellular enzymes of yeast (Kluyveromyces fragilis) by digitonin permeabilization of cell membrane
AUTHOR(S): Gowda, L. R.; Joshi, M. S.; Bhat, S. G.
CORPORATE SOURCE: Dep. Food Chem., Cent. Food Technol. Res. Inst., Mysore, 570 013, India
SOURCE: Analytical Biochemistry (1988), 175(2), 531-6
CODEN: ANBCA2; ISSN: 0003-2697
DOCUMENT TYPE: Journal
LANGUAGE: English

L10 ANSWER 58 OF 92 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN
DUPLICATE 23
ACCESSION NUMBER: 1989:4154 BIOSIS
DOCUMENT NUMBER: PREV198987004154; BA87:4154
TITLE: EXAMINATION OF CATHEPSINS B D H AND L ACTIVITIES IN DRY-CURED HAMS.
AUTHOR(S): TOLDRA F [Reprint author]; ETHERINGTON D J
CORPORATE SOURCE: INST AGROQUIMICA TECNOL DE ALIMENTOS, JAIME ROIG 11, VALENCIA 46010, SPAIN
SOURCE: Meat Science, (1988) Vol. 23, No. 1, pp. 1-8.
CODEN: MESCDN. ISSN: 0309-1740.
DOCUMENT TYPE: Article
FILE SEGMENT: BA
LANGUAGE: ENGLISH
ENTRY DATE: Entered STN: 6 Dec 1988
Last Updated on STN: 6 Dec 1988

L10 ANSWER 59 OF 92 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1986:621623 HCAPLUS
DOCUMENT NUMBER: 105:221623
TITLE: Specificity of human glucosylceramide .beta.-glucosidase towards synthetic glucosylsphingolipids inserted into liposomes. Kinetic studies in a detergent-free **assay** system
AUTHOR(S): Sarmientos, Francesco; Schwarzmann, Guenter; Sandhoff, Konrad
CORPORATE SOURCE: Inst. Org. Chem. Biochem., Univ. Bonn, Bonn, D-5300/1, Fed. Rep. Ger.
SOURCE: European Journal of Biochemistry (1986), 160(3), 527-35
CODEN: EJBCAI; ISSN: 0014-2956
DOCUMENT TYPE: Journal
LANGUAGE: English

L10 ANSWER 60 OF 92 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1986:182111 HCAPLUS
DOCUMENT NUMBER: 104:182111
TITLE: A fluorimetric method for measuring the activity of soil enzymes
AUTHOR(S): Darrah, P. R.; Harris, P. J.
CORPORATE SOURCE: Dep. Soil Sci., Univ. Reading, Reading, RG1 5AQ, UK
SOURCE: Plant and Soil (1986), 92(1), 81-8

CODEN: PLSOA2; ISSN: 0032-079X
DOCUMENT TYPE: Journal
LANGUAGE: English

L10 ANSWER 61 OF 92 MEDLINE on STN DUPLICATE 24
ACCESSION NUMBER: 85231488 MEDLINE
DOCUMENT NUMBER: 85231488 PubMed ID: 2989024
TITLE: Glycosidases in normal and regenerating chicken liver, hepatoma Mc-29, Rous sarcoma, in turkey poult liver and hemocytoblastomes, provoked by the leukosis virus strain Mc-31.
AUTHOR: Chelibonova-Lorer H; Ivanov S; Gavazova E; Antonova M
SOURCE: INTERNATIONAL JOURNAL OF BIOCHEMISTRY, (1985) 17 (4) 541-4. Journal code: 0250365. ISSN: 0020-711X.
PUB. COUNTRY: ENGLAND: United Kingdom
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 198508
ENTRY DATE: Entered STN: 19900320
Last Updated on STN: 20000303
Entered Medline: 19850822

L10 ANSWER 62 OF 92 MEDLINE on STN DUPLICATE 25
ACCESSION NUMBER: 85172552 MEDLINE
DOCUMENT NUMBER: 85172552 PubMed ID: 3838626
TITLE: Soluble chromogenic substrates for the **assay** of endo-1,4-beta-xylanases and endo-1,4-beta-glucanases.
AUTHOR: Biely P; Mislovicova D; Toman R
SOURCE: ANALYTICAL BIOCHEMISTRY, (1985 Jan) 144 (1) 142-6. Journal code: 0370535. ISSN: 0003-2697.
PUB. COUNTRY: United States
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 198505
ENTRY DATE: Entered STN: 19900320
Last Updated on STN: 19900320
Entered Medline: 19850520

L10 ANSWER 63 OF 92 MEDLINE on STN DUPLICATE 26
ACCESSION NUMBER: 85146748 MEDLINE
DOCUMENT NUMBER: 85146748 PubMed ID: 6241432
TITLE: A combined **assay** of three lysosomal marker enzymes: acid phosphatase, beta-D-glucuronidase, and beta-N-acetyl-D-hexosaminidase.
AUTHOR: Loffler B M; Hesse B; Kunze H
SOURCE: ANALYTICAL BIOCHEMISTRY, (1984 Nov 1) 142 (2) 312-6. Journal code: 0370535. ISSN: 0003-2697.
PUB. COUNTRY: United States
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 198503
ENTRY DATE: Entered STN: 19900320
Last Updated on STN: 19900320
Entered Medline: 19850329

L10 ANSWER 64 OF 92 LIFESCI COPYRIGHT 2004 CSA on STN
ACCESSION NUMBER: 84:59108 LIFESCI
TITLE: A combined **assay** of three lysosomal marker enzymes: Acid phosphatase, beta -D-glucuronidase, and beta -N-acetyl-D-hexosaminidase.
AUTHOR: Loeffler, B.M.; Hesse, B.; Kunze, H.

CORPORATE SOURCE: Dep. Biochem. Pharmacol., Max-Planck-Inst. Med., Hermann-Rein-Str. 3, 3400 Goettingen, FRG
SOURCE: ANAL. BIOCHEM., (1984) vol. 142, no. 2, pp. 312-316.
DOCUMENT TYPE: Journal
FILE SEGMENT: L
LANGUAGE: English
SUMMARY LANGUAGE: English

L10 ANSWER 65 OF 92 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN
ACCESSION NUMBER: 1985:254867 BIOSIS
DOCUMENT NUMBER: PREV198579034863; BA79:34863
TITLE: EFFECT OF CASTANOSPERMINE ON THE STRUCTURE AND SECRETION OF GLYCOPROTEIN ENZYMES IN ASPERGILLUS-FUMIGATUS.
AUTHOR(S): ELBEIN A D [Reprint author]; MITCHELL M; MOLYNEUX R J
CORPORATE SOURCE: DEP BIOCHEM, UNIV TEXAS HEALTH SCI CENT, SAN ANTONIO, TEX 78284, USA
SOURCE: Journal of Bacteriology, (1984) Vol. 160, No. 1, pp. 67-75. CODEN: JOBAAY. ISSN: 0021-9193.
DOCUMENT TYPE: Article
FILE SEGMENT: BA
LANGUAGE: ENGLISH

L10 ANSWER 66 OF 92 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN DUPLICATE 27
ACCESSION NUMBER: 1984:215948 BIOSIS
DOCUMENT NUMBER: PREV198477048932; BA77:48932
TITLE: BETA-N ACETYL HEXOSAMINIDASE EC-3.2.1.52 AND ALPHA-D MANNOSIDASE EC-3.2.1.24 FROM THE EPIGONAL LYMPHO MYELOID ORGAN OF THE NURSE SHARK GINGLYMOSTOMA-CIRRATUM.
AUTHOR(S): LUNDBLAD G [Reprint author]; FANGE R; SLETTENGREN K
CORPORATE SOURCE: DEP CHEM, NATL BACTERIOL LAB, S-10521 STOCKHOLM, SWEDEN
SOURCE: Comparative Biochemistry and Physiology B, (1983) Vol. 76, No. 2, pp. 277-282. CODEN: CBPBB8. ISSN: 0305-0491.
DOCUMENT TYPE: Article
FILE SEGMENT: BA
LANGUAGE: ENGLISH

L10 ANSWER 67 OF 92 MEDLINE on STN DUPLICATE 28
ACCESSION NUMBER: 83051471 MEDLINE
DOCUMENT NUMBER: 83051471 PubMed ID: 6814791
TITLE: Colorimetric **assays** for N-acetyl-beta-D-glucosaminidase and beta-D-galactosidase in human urine using newly-developed omega-nitrostyryl substrates.
AUTHOR: Yuen C T; Price R G; Chattagoon L; Richardson A C; Praill P F
SOURCE: CLINICA CHIMICA ACTA, (1982 Sep 15) 124 (2) 195-204. Journal code: 1302422. ISSN: 0009-8981.
PUB. COUNTRY: Netherlands
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 198301
ENTRY DATE: Entered STN: 19900317
Last Updated on STN: 19900317
Entered Medline: 19830119

L10 ANSWER 68 OF 92 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN
ACCESSION NUMBER: 1982:182099 BIOSIS
DOCUMENT NUMBER: PREV198273042083; BA73:42083
TITLE: GLYCOSIDASES AND ACID PHOSPHATASE IN VACUOLES ISOLATED FROM ROOT TIPS OF ZEA-MAYS.
AUTHOR(S): POHL U [Reprint author]
CORPORATE SOURCE: MAX-PLANCK-INST MOLEKULARE GENETIK, ABT TRAUTNER, IHNESTR

63/73, D-1000 BERLIN 33
SOURCE: Berichte der Deutschen Botanischen Gesellschaft, (1981) Vol. 94, No. 1-2, pp. 127-134.
CODEN: BEDBAP. ISSN: 0365-9631.
DOCUMENT TYPE: Article
FILE SEGMENT: BA
LANGUAGE: GERMAN

L10 ANSWER 69 OF 92 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN
ACCESSION NUMBER: 1980:93489 BIOSIS
DOCUMENT NUMBER: PREV198019030987; BR19:30987
TITLE: URINARY ENZYME **ASSAYS** IN TOXICOLOGICAL STUDIES IN THE RAT AND MARMOSET CALLITHRIX-JACCHUS.
AUTHOR(S): PIERCE R J [Reprint author]; PRICE R G; MARSDEN A M; FOWLER J S L
CORPORATE SOURCE: DEP BIOCHEM, QUEEN ELIZABETH COLL, UNIV LOND, CAMPDEN HILL, LONDON W8 7AH, ENGL, UK
SOURCE: (1979) pp. P201-214. DUBACH, U. C. AND U. SCHMIDT (ED.). CURRENT PROBLEMS IN CLINICAL BIOCHEMISTRY, VOL. 9. DIAGNOSTIC SIGNIFICANCE OF ENZYMES AND PROTEINS IN URINE; PROCEEDINGS OF THE INTERNATIONAL SYMPOSIUM ON THE BIOCHEMICAL ASPECTS OF THE DIAGNOSTIC VALUE OF URINE, KANDERSTEG, SWITZERLAND, MAR. 8-11, 1978. 385P. HANS HUBER PUBLISHERS: BERN, SWITZERLAND. ILLUS. PAPER.
Publisher: Series: Current Problems in Clinical Biochemistry.
ISBN: 3-456-80689-2.
DOCUMENT TYPE: Book
Conference; (Meeting)
FILE SEGMENT: BR
LANGUAGE: ENGLISH

L10 ANSWER 70 OF 92 EMBASE COPYRIGHT 2004 ELSEVIER INC. ALL RIGHTS RESERVED. on STN DUPLICATE 29
ACCESSION NUMBER: 80013051 EMBASE
DOCUMENT NUMBER: 1980013051
TITLE: Coordinate secretion of acid hydrolases in rat bile. Hepatocyte exocytosis of lysosomal protein?.
AUTHOR: LaRusso N.F.; Fowler S.
CORPORATE SOURCE: Rockefeller Univ., New York, N.Y. 10021, United States
SOURCE: Journal of Clinical Investigation, (1979) 64/4 (948-954).
CODEN: JCINAO
COUNTRY: United States
DOCUMENT TYPE: Journal
FILE SEGMENT: 029 Clinical Biochemistry
LANGUAGE: English

L10 ANSWER 71 OF 92 MEDLINE on STN
ACCESSION NUMBER: 79190602 MEDLINE
DOCUMENT NUMBER: 79190602 PubMed ID: 109249
TITLE: Urinary enzyme **assays** in toxicological studies in the rat and marmoset.
AUTHOR: Pierce R J; Price R G; Marsden A M; Fowler J S
SOURCE: CURRENT PROBLEMS IN CLINICAL BIOCHEMISTRY, (1979) (9) 201-14.
Journal code: 0353507. ISSN: 0300-1725.
PUB. COUNTRY: Switzerland
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 197908
ENTRY DATE: Entered STN: 19900315
Last Updated on STN: 19970203
Entered Medline: 19790829

L10 ANSWER 72 OF 92 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1979:521658 HCAPLUS
DOCUMENT NUMBER: 91:121658
TITLE: Enzymic **assays** of diagnostic value in mucopolysaccharidoses and sphingolipidoses
AUTHOR(S): Ricci, R.; Tavella, D.; Segni, G.; Serra, A.
CORPORATE SOURCE: Fac. Med., Univ. Cattolica Sacro Cuore, Rome, Italy
SOURCE: Perspectives in Inherited Metabolic Diseases (1979), 1(Adv. Inborn Errors Metab.), 193-202
CODEN: PIMDDN; ISSN: 0391-7223
DOCUMENT TYPE: Journal
LANGUAGE: English

L10 ANSWER 73 OF 92 MEDLINE on STN DUPLICATE 30
ACCESSION NUMBER: 79172457 MEDLINE
DOCUMENT NUMBER: 79172457 PubMed ID: 108231
TITLE: Hydrolase activities in normoblasts of beta-thalassemic patients.
AUTHOR: Yatziv S; Abeliuk P; Rachmilewitz E A; Cividalli G; Kahane I
SOURCE: ISRAEL JOURNAL OF MEDICAL SCIENCES, (1978 Nov) 14 (11) 1124-6.
Journal code: 0013105. ISSN: 0021-2180.
PUB. COUNTRY: Israel
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 197907
ENTRY DATE: Entered STN: 19900315
Last Updated on STN: 19900315
Entered Medline: 19790716

L10 ANSWER 74 OF 92 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN DUPLICATE 31
ACCESSION NUMBER: 1978:235939 BIOSIS
DOCUMENT NUMBER: PREV197866048436; BA66:48436
TITLE: SCREENING FOR FLAVONOL 3 GLYCOSIDE SPECIFIC **BETA GLYCOSIDASES** IN PLANTS USING A SPECTROPHOTOMETRIC ENZYMATIC **ASSAY**.
AUTHOR(S): SURHOLT E [Reprint author]; HOESEL W
CORPORATE SOURCE: UNIV HINDENBURGPL 55, D-4400 MUENSTER, W GER
SOURCE: Phytochemistry (Oxford), (1978) Vol. 17, No. 5, pp. 873-878.
CODEN: PYTCAS. ISSN: 0031-9422.
DOCUMENT TYPE: Article
FILE SEGMENT: BA
LANGUAGE: ENGLISH

L10 ANSWER 75 OF 92 SCISEARCH COPYRIGHT 2004 THOMSON ISI on STN
ACCESSION NUMBER: 78:211790 SCISEARCH
THE GENUINE ARTICLE: EZ521
TITLE: SCREENING FOR FLAVONOL 3-GLYCOSIDE SPECIFIC **BETA** -**GLYCOSIDASES** IN PLANTS USING A SPECTROPHOTOMETRIC ENZYMATIC **ASSAY**
AUTHOR: SURHOLT E (Reprint); HOESEL W
CORPORATE SOURCE: UNIV MUNSTER, LEHRSTUHL BIOCHEM PFLANZEN, D-4400 MUNSTER, FED REP GER (Reprint)
COUNTRY OF AUTHOR: FEDERAL REPUBLIC OF GERMANY
SOURCE: PHYTOCHEMISTRY, (1978) Vol. 17, No. 5, pp. 873-877.
DOCUMENT TYPE: Article; Journal
FILE SEGMENT: LIFE; AGRI
LANGUAGE: ENGLISH
REFERENCE COUNT: 30

L10 ANSWER 76 OF 92 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN
DUPLICATE 32
ACCESSION NUMBER: 1979:144353 BIOSIS
DOCUMENT NUMBER: PREV197967024353; BA67:24353
TITLE: ISOLATION OF PLANT **BETA GLYCOSIDASES** IN POLY ACRYLAMIDE GEL.
AUTHOR(S): ZHDANOV YU A [Reprint author]; KESSLER R M; YAKUBOVA N R; KOLOKOLOVA N S
CORPORATE SOURCE: RES INST BIOL, ROSTOV UNIV, ROSTOV-NA-DONU, USSR
SOURCE: Fiziologiya Rastenii (Moscow), (1978) Vol. 25, No. 3, pp. 623-629.
CODEN: FZRSAV. ISSN: 0015-3303.
DOCUMENT TYPE: Article
FILE SEGMENT: BA
LANGUAGE: RUSSIAN

L10 ANSWER 77 OF 92 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN
ACCESSION NUMBER: 1979:113335 BIOSIS
DOCUMENT NUMBER: PREV197917053335; BR17:53335
TITLE: CONTINUOUS FLOW FLUOROMETRIC **ASSAY** OF LYSOSOMAL ENZYMES.
AUTHOR(S): MORGAN D M L; VINT S; RIDEOUT J M
SOURCE: Medical Laboratory Sciences, (1978) Vol. 35, No. 4, pp. 335-341.
CODEN: MLASDU. ISSN: 0308-3616.
DOCUMENT TYPE: Article
FILE SEGMENT: BR
LANGUAGE: Unavailable

L10 ANSWER 78 OF 92 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1978:559856 HCAPLUS
DOCUMENT NUMBER: 89:159856
TITLE: Extracellular glycosidases of some oral streptococci
AUTHOR(S): Shizukuishi, Satoshi; Taniguchi, Tateshi; Shibata, Satoaki; Matsumura, Takashi; Nonaka, Hideki; Saji, Seisuke
CORPORATE SOURCE: Dep. Prev. Dent., Osaka Univ. Dent. Sch., Osaka, Japan
SOURCE: Nippon Shishubyo Gakkai Kaishi (1978), 20(2), 147-51
CODEN: NSKADI; ISSN: 0385-0110
DOCUMENT TYPE: Journal
LANGUAGE: Japanese

L10 ANSWER 79 OF 92 EMBASE COPYRIGHT 2004 ELSEVIER INC. ALL RIGHTS RESERVED. on STN
ACCESSION NUMBER: 80165852 EMBASE
DOCUMENT NUMBER: 1980165852
TITLE: Diagnosis of Gaucher's disease in cultured skin fibroblasts and leucocytes.
AUTHOR: Butterworth J.; Broadhead D.M.
CORPORATE SOURCE: Dept. Pathol., Roy. Hosp. Sick Child., Edinburgh EH9 1LF, United Kingdom
SOURCE: Journal of Inherited Metabolic Disease, (1978) 1/3 (111-113).
CODEN: JIMDDP
COUNTRY: United Kingdom
DOCUMENT TYPE: Journal
FILE SEGMENT: 029 Clinical Biochemistry
022 Human Genetics
013 Dermatology and Venereology
LANGUAGE: English

L10 ANSWER 80 OF 92 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1975:95398 HCAPLUS

DOCUMENT NUMBER: 82:95398
TITLE: Glycosidases in cell wall-degrading extracts of ripening tomato fruits
AUTHOR(S): Wallner, Stephen J.; Walker, John E.
CORPORATE SOURCE: Food Lab., U. S. Army Natick Lab., Natick, MA, USA
SOURCE: Plant Physiology (1975), 55(1), 94-8
CODEN: PLPHAY; ISSN: 0032-0889
DOCUMENT TYPE: Journal
LANGUAGE: English

L10 ANSWER 81 OF 92 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1974:106294 HCAPLUS
DOCUMENT NUMBER: 80:106294
TITLE: Enzymes of carbohydrate metabolism in normal human sebaceous glands
AUTHOR(S): Im, Michael J. C.; Hoopes, John E.
CORPORATE SOURCE: Sch. Med., Johns Hopkins Univ., Baltimore, MD, USA
SOURCE: Journal of Investigative Dermatology (1974), 62(3), 153-60
CODEN: JIDEAE; ISSN: 0022-202X
DOCUMENT TYPE: Journal
LANGUAGE: English

L10 ANSWER 82 OF 92 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1971:432333 HCAPLUS
DOCUMENT NUMBER: 75:32333
TITLE: Characteristics of lysosomes in the rat placental cells
AUTHOR(S): Schultz, R. L.; Jacques, P. J.
CORPORATE SOURCE: Lab. Chim. Physiol., Univ. Louvain, Louvain, Belg.
SOURCE: Archives of Biochemistry and Biophysics (1971), 144(1), 292-303
CODEN: ABBIA4; ISSN: 0003-9861
DOCUMENT TYPE: Journal
LANGUAGE: English

L10 ANSWER 83 OF 92 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1972:97624 HCAPLUS
DOCUMENT NUMBER: 76:97624
TITLE: Comparison of the .**beta.-glycosidase** excretion during kidney damage induced by 4-nitrophenylarsonic acid and by rabbit antirat kidney antibodies
AUTHOR(S): Price, R. G.; Dance, N.; Robinson, D.
CORPORATE SOURCE: Queen Elizabeth Coll., Univ. London, London, UK
SOURCE: European Journal of Clinical Investigation (1971), 2(1), 47-51
CODEN: EJCIB8; ISSN: 0014-2972
DOCUMENT TYPE: Journal
LANGUAGE: English

L10 ANSWER 84 OF 92 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN
ACCESSION NUMBER: 1971:50750 BIOSIS
DOCUMENT NUMBER: PREV197107050750; BR07:50750
TITLE: FLUORIMETRIC DETECTION AND **ASSAY** OF KIDNEY AND URINARY **BETA GLYCOSIDASES**.
AUTHOR(S): ROBINSON D
SOURCE: (1970) pp. 42-52. ROTH, M. (EDITED BY). INTERNATIONAL CONGRESS OF CLINICAL CHEMISTRY, VOL. 1: METHODS IN CLINICAL CHEMISTRY. SYMPOSIUM. XIII + 321P. ILLUS. S. KARGER: BASEL, SWITZERLAND; UNIVERSITY PARK PRESS: BALTIMORE, MD., U.S.A.
DOCUMENT TYPE: Book
FILE SEGMENT: BR
LANGUAGE: Unavailable

L10 ANSWER 85 OF 92 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1971:135407 HCAPLUS
DOCUMENT NUMBER: 74:135407
TITLE: Histochemical localization of .**beta**.-**glycosidases** in roots of Zea mays. I. Simultaneous coupling azo-dye technique for the localization of .beta.-glucosidase and .beta.-galactosidase
AUTHOR(S): Ashford, Anne E.
CORPORATE SOURCE: Dep. Biol., Carleton Univ., Ottawa, ON, Can.
SOURCE: Protoplasma (1970), 71(3), 281-93
CODEN: PROTA5; ISSN: 0033-183X
DOCUMENT TYPE: Journal
LANGUAGE: English

L10 ANSWER 86 OF 92 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1970:52980 HCAPLUS
DOCUMENT NUMBER: 72:52980
TITLE: Excretion of N-acetyl-.beta.-glucosaminidase and .beta.-galactosidase by patients with renal disease
AUTHOR(S): Dance, N.; Price, R. G.; Cattell, W. R.; Lansdell, J.; Richards, B.
CORPORATE SOURCE: Queen Elizabeth Coll., Univ. London, London, UK
SOURCE: Clinica Chimica Acta (1970), 27(1), 87-92
CODEN: CCATAR; ISSN: 0009-8981
DOCUMENT TYPE: Journal
LANGUAGE: English

L10 ANSWER 87 OF 92 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1970:52979 HCAPLUS
DOCUMENT NUMBER: 72:52979
TITLE: Excretion of N-acetyl-.beta.-glucosaminidase and .beta.-galactosidase following surgery to the kidney
AUTHOR(S): Price, Robert G.; Dance, Norman; Richards, Brian; Cattell, William R.
CORPORATE SOURCE: Dep. Biochem., Queen Elizabeth Coll., London, UK
SOURCE: Clinica Chimica Acta (1970), 27(1), 65-72
CODEN: CCATAR; ISSN: 0009-8981
DOCUMENT TYPE: Journal
LANGUAGE: English

L10 ANSWER 88 OF 92 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1971:400467 HCAPLUS
DOCUMENT NUMBER: 75:467
TITLE: Fluorimetric detection and **assay** of kidney and urinary .**beta**.-**glycosidases**
AUTHOR(S): Robinson, Donald
CORPORATE SOURCE: Queen Elizabeth Coll., Univ. London, London, UK
SOURCE: Int. Congr. Clin. Chem., [Proc.], 7th (1970), Meeting Date 1969, Volume 1, 42-52. Editor(s): Roth, Marc. Karger: Basel, Switz.
CODEN: 23ENAA
DOCUMENT TYPE: Conference
LANGUAGE: English

L10 ANSWER 89 OF 92 MEDLINE on STN DUPLICATE 33
ACCESSION NUMBER: 68052314 MEDLINE
DOCUMENT NUMBER: 68052314 PubMed ID: 4862741
TITLE: Fluorometric **assays** of different **beta-glycosidases** in microdissected pancreatic islets from obese-hyperglycemic mice.
AUTHOR: Hellman B
SOURCE: METABOLISM: CLINICAL AND EXPERIMENTAL, (1967 Nov) 16 (11)

1051-8.
Journal code: 0375267. ISSN: 0026-0495.
PUB. COUNTRY: United States
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 196801
ENTRY DATE: Entered STN: 19900101
Last Updated on STN: 19900101
Entered Medline: 19680121

L10 ANSWER 90 OF 92 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1968:65819 HCAPLUS
DOCUMENT NUMBER: 68:65819
TITLE: Mammalian glycosidases and their inhibition by aldonolactones
AUTHOR(S): Levvy, Guildford A.; Conchie, James
CORPORATE SOURCE: Rowett Res. Inst., Aberdeen, UK
SOURCE: Methods in Enzymology (1966), 8, 571-84
CODEN: MENZAU; ISSN: 0076-6879
DOCUMENT TYPE: Journal
LANGUAGE: English

L10 ANSWER 91 OF 92 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1965:31672 HCAPLUS
DOCUMENT NUMBER: 62:31672
ORIGINAL REFERENCE NO.: 62:5636f-h
TITLE: Rat intestinal 6-bromo-2-naphthyl glycosidase and disaccharidase activities. I. Enzymic properties and distribution in the digestive tract of conventional and germ-free animals
AUTHOR(S): Dahlqvist, A.; Bull, B.; Gustafsson, B. E.
CORPORATE SOURCE: Univ. Lund, Swed.
SOURCE: Archives of Biochemistry and Biophysics (1965), 109(1), 150-8
CODEN: ABBIA4; ISSN: 0003-9861
DOCUMENT TYPE: Journal
LANGUAGE: English

L10 ANSWER 92 OF 92 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1964:413184 HCAPLUS
DOCUMENT NUMBER: 61:13184
ORIGINAL REFERENCE NO.: 61:2225c-e
TITLE: Fluorimetric determination of glycosidases in the locust (Locusta migratoria) and other insects
AUTHOR(S): Robinson, D.
CORPORATE SOURCE: Univ.London
SOURCE: Comparative Biochemistry and Physiology (1964), 12(1), 95-105
CODEN: CBCPAI; ISSN: 0010-406X
DOCUMENT TYPE: Journal
LANGUAGE: Unavailable

=> d his

(FILE 'HOME' ENTERED AT 09:51:56 ON 21 JAN 2004)

FILE 'MEDLINE, EMBASE, BIOSIS, BIOTECHDS, SCISEARCH, HCAPLUS, NTIS, LIFESCI' ENTERED AT 09:53:31 ON 21 JAN 2004
L1 2031 S BETA(A)GLYCOSIDASE?
L2 2 S THREMOPHILIC
L3 188 S L1 AND ASSAY?
L4 6329367 S CLON? OR EXPRESS? OR RECOMBINANT

```
L5        141988 S OLIGOSACCHARIDE OR HETEROSACCHARIDE
L6         24552 S SYNTHESIS AND L5
L7            91 S L1 AND L6
L8            16 S L4 AND L7
L9            10 DUP REM L8 (6 DUPLICATES REMOVED)
L10           92 DUP REM L3 (96 DUPLICATES REMOVED)
L11            4 S L10 AND L5

=> e matsui i/au
E1             1     MATSUI HOROYUKI/AU
E2             1     MATSUI HROSHI/AU
E3           621 --> MATSUI I/AU
E4             1     MATSUI I G/AU
E5             1     MATSUI I KOJI/AU
E6             1     MATSUI I M/AU
E7             1     MATSUI I MASANAO/AU
E8             1     MATSUI I S/AU
E9             3     MATSUI I S L/AU
E10            1     MATSUI ICHINOSUKE/AU
E11           91     MATSUI ICHIRO/AU
E12            1     MATSUI ICHIZO/AU

=> s e3
L12          621 "MATSUI I"/AU

=> e ishikawa k/au
E1             1     ISHIKAWA JYUNKO/AU
E2             1     ISHIKAWA JYUZABURO/AU
E3          8313 --> ISHIKAWA K/AU
E4             5     ISHIKAWA K */AU
E5            18     ISHIKAWA K B/AU
E6             1     ISHIKAWA K H/AU
E7           209     ISHIKAWA K I/AU
E8             1     ISHIKAWA K J/AU
E9             1     ISHIKAWA K N/AU
E10            4     ISHIKAWA K S/AU
E11            4     ISHIKAWA K Y/AU
E12            2     ISHIKAWA KACHIHIRO/AU

=> s e3
L13         8313 "ISHIKAWA K"/AU

=> e ishida h/au
E1             6     ISHIDA GORO/AU
E2             1     ISHIDA GOROU/AU
E3          5906 --> ISHIDA H/AU
E4             1     ISHIDA H */AU
E5             1     ISHIDA H HIDEKI/AU
E6             4     ISHIDA H I/AU
E7            13     ISHIDA H K/AU
E8             2     ISHIDA H S/AU
E9             1     ISHIDA H Y/AU
E10            1     ISHIDA HAITOSHI/AU
E11          183     ISHIDA HAJIME/AU
E12            1     ISHIDA HAKASE/AU

=> s e3
L14         5906 "ISHIDA H"/AU

=> e kosugi y/au
E1             2     KOSUGI W/AU
E2             2     KOSUGI WATARU/AU
E3           454 --> KOSUGI Y/AU
E4             1     KOSUGI Y */AU
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E5            7      KOSUGI YAE/AU
E6            9      KOSUGI YASUHIKO/AU
E7            1      KOSUGI YASUHIRO/AU
E8            5      KOSUGI YASUHITO/AU
E9            1      KOSUGI YASUMASA/AU
E10           1      KOSUGI YASUNORI/AU
E11           1      KOSUGI YASUO/AU
E12           2      KOSUGI YASUSHI/AU

=> s e3
L15         454 "KOSUGI Y"/AU

=> d his

     (FILE 'HOME' ENTERED AT 09:51:56 ON 21 JAN 2004)

     FILE 'MEDLINE, EMBASE, BIOSIS, BIOTECHDS, SCISEARCH, HCAPLUS, NTIS,
     LIFESCI' ENTERED AT 09:53:31 ON 21 JAN 2004
L1          2031 S BETA(A)GLYCOSIDASE?
L2             2 S THREMOPHILIC
L3           188 S L1 AND ASSAY?
L4       6329367 S CLON? OR EXPRESS? OR RECOMBINANT
L5        141988 S OLIGOSACCHARIDE OR HETEROSACCHARIDE
L6         24552 S SYNTHESIS AND L5
L7            91 S L1 AND L6
L8            16 S L4 AND L7
L9            10 DUP REM L8 (6 DUPLICATES REMOVED)
L10           92 DUP REM L3 (96 DUPLICATES REMOVED)
L11            4 S L10 AND L5
                 E MATSUI I/AU
L12          621 S E3
                 E ISHIKAWA K/AU
L13         8313 S E3
                 E ISHIDA H/AU
L14         5906 S E3
                 E KOSUGI Y/AU
L15          454 S E3

=> s l12 or l13 or l14 or l15
L16       15129 L12 OR L13 OR L14 OR L15

=> s l3 and l16
L17            0 L3 AND L16

=> s l1 and l16
L18            4 L1 AND L16

=> dup rem l18
PROCESSING COMPLETED FOR L18
L19            1 DUP REM L18 (3 DUPLICATES REMOVED)

=> d all

L19  ANSWER 1 OF 1     MEDLINE on STN                    DUPLICATE 1
AN   2000141228     MEDLINE
DN   20141228   PubMed ID: 10675537
TI   Novel substrate specificity of a membrane-bound beta-
     glycosidase from the hyperthermophilic archaeon Pyrococcus
     horikoshii.
AU   Matsui I; Sakai Y; Matsui E; Kikuchi H; Kawarabayasi Y; Honda K
CS   National Institute of Bioscience and Human-Technology, Tsukuba, Ibaraki,
     Japan.. ikmatsui@nibh.go.jp
SO   FEBS LETTERS, (2000 Feb 11) 467 (2-3) 195-200.
     Journal code: 0155157. ISSN: 0014-5793.
```

CY Netherlands
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 200003
ED Entered STN: 20000413
    Last Updated on STN: 20000413
    Entered Medline: 20000331
AB A **beta-glycosidase** gene homolog of Pyrococcus horikoshii (BGPh) was successfully expressed in Escherichia coli. The enzyme was localized in a membrane fraction and solubilized with 2.5% Triton X-100 at 85 degrees C for 15 min. The optimum pH was 6.0 and the optimum temperature was over 100 degrees C, respectively. BGPh stability was dependent on the presence of Triton X-100, the enzyme's half-life at 90 degrees C (pH 6.0) was 15 h. BGPh has a novel substrate specificity with k(cat)/K(m) values high enough for hydrolysis of beta-D-Glcp derivatives with long alkyl chain at the reducing end and low enough for the hydrolysis of beta-linked glucose dimer more hydrophilic than aryl- or alkyl-beta-D-Glcp.
CT Check Tags: Comparative Study
     Amino Acid Sequence
     Binding Sites
     Cloning, Molecular
     Escherichia coli: GE, genetics
     Glucosylceramidase: CH, chemistry
     Glucosylceramidase: GE, genetics
    *Glucosylceramidase: ME, metabolism
     Hydrogen-Ion Concentration
    *Membrane Proteins: ME, metabolism
     Molecular Sequence Data
    *Pyrococcus: EN, enzymology
     Sequence Alignment
     Substrate Specificity
     Temperature
CN 0 (Membrane Proteins); EC 3.2.1.45 (Glucosylceramidase)

=> d his

    (FILE 'HOME' ENTERED AT 09:51:56 ON 21 JAN 2004)

    FILE 'MEDLINE, EMBASE, BIOSIS, BIOTECHDS, SCISEARCH, HCAPLUS, NTIS, LIFESCI' ENTERED AT 09:53:31 ON 21 JAN 2004

L1   2031 S BETA(A)GLYCOSIDASE?
L2   2 S THREMOPHILIC
L3   188 S L1 AND ASSAY?
L4   6329367 S CLON? OR EXPRESS? OR RECOMBINANT
L5   141988 S OLIGOSACCHARIDE OR HETEROSACCHARIDE
L6   24552 S SYNTHESIS AND L5
L7   91 S L1 AND L6
L8   16 S L4 AND L7
L9   10 DUP REM L8 (6 DUPLICATES REMOVED)
L10   92 DUP REM L3 (96 DUPLICATES REMOVED)
L11   4 S L10 AND L5
             E MATSUI I/AU
L12   621 S E3
             E ISHIKAWA K/AU
L13   8313 S E3
             E ISHIDA H/AU
L14   5906 S E3
             E KOSUGI Y/AU
L15   454 S E3
L16   15129 S L12 OR L13 OR L14 OR L15
L17   0 S L3 AND L16

L18 4 S L1 AND L16
L19 1 DUP REM L18 (3 DUPLICATES REMOVED)

	Issue Date	Pages	Document ID	Title
1	20031016	362	US 20030194784 A1	DNA encoding methymycin and pikromycin
2	20031016	45	US 20030194469 A1	Process for producing aglycon by using diglycosidase and flavor-improved food containing the aglycon and converting agent to be used in the process
3	20030918	25	US 20030175828 A1	Signal amplification by Hybrid Capture
4	20030626	32	US 20030119874 A1	Method for enhancing mutant enzyme activity in gaucher disease
5	20030605	22	US 20030103902 A1	Membrane transportable fluorescent substrates
6	20030508	340	US 20030087405 A1	Products encoded by a methymycin/pikromycin biosynthetic gene cluster
7	20030417	14	US 20030073165 A1	Directed evolution of thermophilic enzymes
8	20021226	27	US 20020198225 A1	Method for enhancing mutant enzyme activities in lysosomal storage disorders
9	20021107	341	US 20020164742 A1	DNA encoding methymycin and pikromycin
10	20020822	8	US 20020114813 A1	Compounds
11	20020815	341	US 20020110897 A1	Polyketide synthase encoded by a methymycin/pikromycin biosynthetic gene cluster
12	20020801	26	US 20020102635 A1	METHODS FOR MAKING AND USING A THERMOPHILIC ENZYME AS A BETA-GLYCOSIDASE
13	20020606	11	US 20020068340 A1	COMBINATORIAL ENZYME DEVELOPMENT
14	20020321	25	US 20020035072 A1	Method for enhancing mutant enzyme activities in lysosomal storage disorders

	Issue Date	Pages	Document ID	Title
15	20030729	32	US 6599919 B2	Method for enhancing mutant enzyme activities in lysosomal storage disorders
16	20030708	33	US 6589964 B2	Method for enhancing mutant enzyme activities in lysosomal storage disorders
17	20030624	34	US 6583158 B1	Method for enhancing mutant enzyme activities in lysosomal storage disorders
18	20030114	40	US 6506592 B1	Hyperthermophilic alpha-glucosidase gene and its use
19	20020101	27	US 6335179 B1	Directed evolution of thermophilic enzymes
20	20010814	7	US 6274349 B1	Process for the preparation of long-chain alkylglycosides
21	20010724	334	US 6265202 B1	DNA encoding methymycin and pikromycin
22	19990817		US 5939250 A	Production of enzymes having desired activities by mutagenesis
23	19981103		US 5830696 A	Directed evolution of thermophilic enzymes
24	19970930		US 5672470 A	Microbial process for detection of toxic substances
25	19940621		US 5322686 A	Pharmaceutical preparation for controlling pathogenic intestinal bacteria

	Issue Date	Pages	Document ID	Title
26	19940308		US 5292669 A	Agents for the detection of substrates with hydrolase activity
27	19940301		US 5290948 A	Process for producing polyhydroxylated piperidines and pyrrolidines and compounds thereof
28	19931109		US 5260428 A	Agent for the detection of substances with hydrolase activity
29	19930413		US 5202233 A	Process for the detection of substances with hydrolase activity
30	19910709		US RE33635 E	Enzymatic assay method

	Issue Date	Pages	Document ID	Title
31	19890919		US 4868106 A	Analytical element and method for determining a component in a test sample
32	19870728		US 4683198 A	Novel maltose dehydrogenase, process for its production, and analytical method using the same
33	19870721		US 4681841 A	Enzymatic assay method
34	19771220		US 4064277 A	Method for processing soybeans

	Issue Date	Pages	Document ID	Title
1	20030729	32	US 6599919 B2	Method for enhancing mutant enzyme activities in lysosomal storage disorders
2	20030708	33	US 6589964 B2	Method for enhancing mutant enzyme activities in lysosomal storage disorders
3	20030624	34	US 6583158 B1	Method for enhancing mutant enzyme activities in lysosomal storage disorders
4	19900417	12	US 4918009 A	Method of controlling the regioselectivity of glycosidic bonds

	Issue Date	Pages	Document ID	Title
1	20020801	26	US 20020102635 A1	METHODS FOR MAKING AND USING A THERMOPHILIC ENZYME AS A BETA-GLYCOSIDASE
2	19890919	22	US 4868106 A	Analytical element and method for determining a component in a test sample
3	19870728	17	US 4683198 A	Novel maltose dehydrogenase, process for its production, and analytical method using the same

	L #	Hits	Search Text
1	L1	137	beta adj glycosidase$2
2	L2	657471	assay or substrate$2
3	L3	34	l1 same l2
4	L4	7255	oligosaccharide or heterosaccharide
5	L5	268170	synthesis
6	L6	983	l4 same l5
7	L7	0	l3 same l6
8	L8	4	l1 same l6
9	L9	3526	matsui.in.
10	L10	6413	ishikawa.in.
11	L11	498	kosugi.in.
12	L12	4323	ishida.in.

	L #	Hits	Search Text
13	L13	14595	l9 or l10 or l11 or l12
14	L14	3	l1 and l13